Prepared by the
Growth Management Technical Team

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Short-Term Growth Management Strategy
Information Update 2002 - 2006

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Foreword

The land development and house-building industries attempt to be as responsive as possible to changes in the marketplace. The amount of housing constructed, the location of development activity and the types of housing at any point in time will vary with changing rates of population growth, consumer preferences, interest rates, house prices, expectations for the future and competition in the marketplace.

It is also important to note that this distribution of market expectations reflects the unique circumstances in each sector with respect to the availability of land and infrastructure (serviced land) as well as the ownership of developable land in any given sector. The timing and scale of servicing and subdivision expectations may be more directly affected by marketing strategies of individual developers which can effect the amount of housing constructed in a given sector.

As a result, the transition of "raw" land (i.e., vacant or in agricultural use) to fully-serviced, subdivided, "ready-to-build-on" lots involves a good deal of uncertainty. **The amount of development in any given year is not certain, nor is its distribution among various builders, developers and communities.**

Within this changing environment, the City is called upon to provide utilities and transportation services to enable the "bringing on-stream" of new lands for development. The timing of expenditures for sewers, water and other utilities must occur prior to housing construction. Some transportation facilities may be needed to provide initial access to new development — other facilities may be provided later, as areas develop. The City must also plan for and provide a wide range of other municipal facilities and services to new communities as they grow.

The challenge facing the City then, is to be prudent in avoiding the premature extension of costly utilities and services while making every effort to support a competitive, efficient land development process. This ongoing "balancing" occurs in several forums at the same time (e.g., planning and subdivision approvals, budgeting processes, utility construction scheduling). To assist this balancing process, a shared view of the next five years is necessary.

This report is designed to provide an accurate description of recent suburban residential development activity in Calgary and to forecast activity for the 2002–2006 period. **The report does not contain policy recommendations or explicit budget priorities** — its contribution lies in providing a solid, comprehensive information base to support planning, development and budgeting decisions for utilities in the short-term.

1

Executive Summary and Conclusions

The purpose of this report is to examine the expected fit between residential land demand and supply over the coming five year period. **The intent is to ensure that there exists a sufficient supply of readily developable land, in a variety of locations, to facilitate competitive land and housing markets, while avoiding premature municipal investment in utilities and services.** It is recognized that supply and demand conditions are in a constant state of flux and that it is important to monitor changes on an ongoing basis and to review circumstances annually.

On the basis of the analysis presented in this report, the Growth Management Technical Team presents the following conclusions:

- Over the next five years, Calgary's population is expected to increase by an average of approximately 17,360 people per year, for a total increase of approximately 86,8000 people by the year 2006. This is based upon The Calgary Socio-Economic Outlook Report 2001 through 2006.

- Demand for new single family/duplex housing is expected to average at 5,900 units per year, resulting in an increase of approximately 29,500 new units between 2002 and 2006.

- Demand for new multi-family housing (apartment and townhouse) is expected to be about 13,800 units total for the 2002 and 2006 period or 2,700 units per year. Of this, approximately 43% (5,934 units) are estimated to be built in the developing suburban communities.

- The demand for new housing in new suburban areas will likely require approximately 4,220 acres (Table 13) of land over the next five years, or approximately 800 - 950 acres per year.

- The likely distribution of suburban growth over the next five years is shown on Map 8 of Appendix I.

- The supply of residential land categorized as "Fully Serviced" or as in past years with "Utility Capacity in Place", is sufficient to satisfy expected demand on a **city-wide** basis through the five year forecast period.

However, serviced land shortages may occur in particular sectors within the next five years unless new service extensions are undertaken. Current serviced land capacities should be adequate over the next five years in all other sectors with the possible exception of the South, until a water pump station is built in the sector.

- On the basis of the forecasts contained in this report, and assuming that a "Fully Serviced" supply of land with "Utility Capacity in Place" is maintained in each sector, The City should consider undertaking or facilitating utility extensions over the next five years in the sectors shown below.

Sector	Probable Year in Which Utility Extensions Will be Required	Utility Extensions Required to Service Areas Considered "Partial Serviced" (Yellow Areas)
North	2002-2003	Water and Storm
Northeast	---	---
East	---	---
Southeast	after 2006	Storm
South	2003-2004	Water, Storm, Sanitary
West	2002-2003	Water and Storm
Northwest	2002	Water

- In terms of transportation requirements, the existing transportation infrastructure with the identified upgrading and new links (refer to Sections 9 and 10) has the capacity to support the initial development of most areas. However, the new subdivisions will impact the adjoining transportation network. It should be noted that many intersections throughout the city are already operating at capacity and failing during peak periods (refer to Map 5, Appendix I). These new developments, compound with the overall growth in the city, will further degrade the level of service of the transportation system unless additional expenditures are made beyond those in the City's current capital budget envelope. Alternatively, measures implemented to increase the current modal split in favor of modes other than auto could lesson the demand on the transportation road network, especially during the peak travel periods.

- **The Transportation Infrastructure Investment Plan (TIIP)**
  To ensure that Calgary's transportation system can accommodate growth, City Council approved a comprehensive Transportation Infrastructure Investment Plan (TIIP) in October 1999. The Plan, funded from the Provincial fuel tax revenue-sharing program and additional contributions from the Urban Development Institute and Calgary Parking Authority, was to initially provide $1.208 billion for transportation projects over the ten year period, 1998-2007. In 2000, this figure was revised downward to $1.168 billion to reflect the revised estimate of fuel volume consumption in Calgary. Recently, this figure was further reduced to $1.035 billion to reflect the drop in the fuel tax revenue-sharing program with the Province.

The TIIP includes upgrading and extensions to the roadway network, expansion of the existing LRT system, purchase of new buses and light rail vehicles, and maintenance of existing infrastructure (i.e. roads, transit, cycling and pedestrian facilities). The TIIP reflects the goals of the *Calgary Transportation Plan* and is part of a comprehensive approach to transportation planning in Calgary.

- The City should also continue to anticipate requests from individual developers to extend services to new areas. *The Calgary Plan* indicates that actual expenditure decisions related to the construction of municipal infrastructure should be evaluated through The City's Short Term Growth Management decision making process (Calgary Plan, 2-2.2.2.1H). These requests can be evaluated on their own merits and brought forward to Council for consideration.

  In responding to these requests, Council will find guidance in *The Calgary Plan*. It indicates that decisions on capital expenditures relating to the extension and/or upgrading of municipal water, storm, sanitary, and transportation systems, should be made through the normal budgeting process and after consideration has been given to:

  - the overall capital cost implications of the extensions, including the cost of other services The City provides;

  - The City's financial capability;

  - existing market conditions and anticipated demand as they relate to the proposed expenditure; and

  - the impact of these decisions on the provision of gas, electric, telephone and cable services (Calgary Plan, 2-2.2.2.1I).

2

Purpose of the Update

This report assesses Calgary's current residential land inventory as well as expected supply/demand conditions for the coming five year period (2002-2006). This information base is up-dated annually, in accordance with the Short-Term Growth Management Strategy, as approved by Council in February, 1985.

The report is intended to be used in two ways:

- to provide a common information base and set of forecasts (related to the next 5 years' growth) to support facilities planning and budgeting by civic departments; and

- to provide the Growth Management Steering Committee with a detailed and up-to-date analysis of suburban growth dynamics, providing a framework in which to evaluate the merits of individual requests for new service extensions in suburban areas.

Appendix I provides a detailed look at historical information and future estimates on residential growth in the form of tables, figures and maps.

Appendix II of this report also provides an overview of residential growth areas on a sector by sector basis.

The information base has been developed jointly by staff in several civic departments, coordinated through the Interdepartmental Growth Management Technical Team. The Team includes representatives of the following portfolios:

Land Use & Mobility
Utilities & Environmental Protection
Community Vitality & Protection
Corporate Services
Strategic Services

In addition, representatives from the Calgary Board of Education, Calgary Roman Catholic School Board and Calgary Police Services participate on the Technical Team. In preparing this report, the Team also consulted with representatives of the Urban Development Institute and the Calgary Region Home Builders' Association.

3

Economic Outlook: 2002 - 2006

Calgary's overall economic prospects for the coming five year period were reviewed by The City's Corporate Services in October of 2001. Some of the conclusions of this analysis are summarized below.

- Five year forecast for the Calgary economy:

	2002	2003	2004	2005	2006
Inflation Rate CMA (%)*	3.0	2.3	2.4	2.2	2.2
Population (000's)**	896.8	912.0	926.4	945.0	963.3
Net Migration **	13,400	8,200	7,200	11,300	11,100
Unemployment Rate CMA (%)**	4.5	4.0	3.8	3.6	3.5
Total Housing Starts**	9,500	8,500	8,300	8,500	8,500

* Annual % change, Calgary Census Metropolitan Area
** Annual level

- The Calgary economic region is expected to lead the province in economic growth over most of the 2002-2006 period. Economic growth is expected to increase by 3.7 % by 2003 and average 3.4% by 2006. The firming of the economic rcovery in the rest of Canada from 2003 to 2004, will slow net migration to Calgary as labour markets in those areas become relatively attractive for jobseekers. As the acceleration in the rate of growth slows from 2005 to 2006, Calgary would again become an attractive destination for jobseekers from other provinces.

- The inflation rate is expected to average 3.0 in 2002 and trend downward to 2.2% by 2006 as economic growth moderates and the regions inflation rate is forecasted to remain above the mid-point of the Bank of Canada's inflation target range of 1% to 3%.

- The City of Calgary 2001 population was 876,519, according to the 2001 Civic Census. Natural population increase was 7,779 in 2001 up from 7,044 in 2000. The forecasts shown here predict the total population to reach 963,300 in 2006.

- The forecasted demand for total housing activity is expected to be less than the last five years. Forecasts for the 2002 to 2006 period is expected to average approximately 8,660 units per year. Comparing this to the last five years growth between 1997 and 2001 housing construction averaged 8,982 units per year.

4

Population Growth: 2002 - 2006

Calgary's population grew from 860,749 in April 2000 to 876,519 in April 2001, an increase of 15,770 people, or approximately 1.83%. In comparison, between 1999 and 2000 the population increased by 18,361 people.

Natural increase (births over deaths) accounted for an increase of about 7,779 people. Net migration decreased significantly for the fourth year in a row, to a level of 7,991 (2001), 11,317 (2000), 15,629 (1999) and 21,735 in 1998 (refer to Figure 1).

City population forecasts produced in October, 2001 suggest that Calgary's population will increase by approximately 86,800 people by 2006 (Table 2).

Net migration over this period is forecast to range from 7,200 to 13,400 persons per year. This level of net migration will result in **total** population growth averaging 17,000 to 18,000 persons per year over the forecast period, or approximately 1.8% population growth per year. Figures 2 and 3 compare this forecasted level of growth with that experienced since 1988.

5

Housing Forecasts: 2002 - 2006

The demand for new housing is driven by both an increase in the number of households (e.g., an increasing population and/or changes in its composition) and changes in consumer housing needs/preferences (e.g., consumers choosing a newer or larger house). In turn, the make-up of the population creating a demand for housing at any point in time will affect the level of demand in particular sectors of the city, as some areas have traditionally served specific market segments.

The focus here is on the demand for new single family and duplex housing units. This development continues to account for most of the new housing activity in the city (Table 4). It generally occurs in new suburban areas, and drives the demand for most new subdivision. This new subdivision, in turn, creates a need to extend and upgrade municipal infrastructure. As a result, the manner in which housing demand is distributed among the various sectors of the city affects the need for and timing of substantial expenditures by The City to service new growth areas.

The anticipated level of demand for new single family/duplex housing is provided in Table 2. In 2000, there were 6,036 single family/duplex housing starts within the city, compared to 6,998 starts in 2001 (Table 4). **It is expected that the demand for new single family/duplex units will add approximately 6,500 single family/duplex units in 2002, followed by an average of 5,900 units per year to 2006. This will result in an increase of approximately 29,500 new units (city-wide) between 2002 and 2006.** Figure 4 places this forecasted demand in the context of additions to the single family/duplex housing stock since 1988. Table 4 details housing construction activity over the past five years.

While most housing growth is occurring in new suburban areas, a small proportion (7% over the last five years, see Table 13) of new single family/ duplex starts are located in existing, developed neighbourhoods. This occurs through single family infill/redevelopment in older inner-city communities, as well as construction on vacant lands remaining in various locations throughout the city (the distribution of the 2001 single family building permit applications is illustrated in Map 3). This percentage is monitored yearly by reviewing the previous five years history of where new units are located and used to assign the proportion of the new growth to the developing communities i.e., 93% of expected new home construction to go to the new communities (see Table 13).

For the purposes of this report focus is given to the developing communities which helps determine the forecast component (Table 13 and Map 8). Each year's analysis determines the developing communites (Map 7) and the percentage of the forecasted growth to be allocated to these areas.

Forecasts combine single family and two family (duplex and semi-detached) housing units as their land needs and servicing requirements are generally similar.

With the exception of Table 5, references to multi-family lots/units throughout the report refer to a combination of townhouses and apartments. In part, Table 5 helps to show market share distributions of multi-family housing, particularly between developing communities in the suburbs and the remainder of the city. The market share is discussed in more detail in Section 7.

6

Suburban Residential Land Requirements: 2002 - 2006

The demand for residential land in the short-term is calculated on the basis of **an average density of 6.5 units per gross residential acre.** This reflects the average density of outline plans submitted in 1998 to 2001 for suburban communities developing in Calgary. Densities proposed and achieved will continue to be closely monitored so that estimated short-term land requirements can reflect current market conditions to the greatest extent possible.

Average densities in developing communities have been increasing slightly in recent years. It is expected that demographic and market changes will lead to a gradual increase in the proportions of multi-family units and smaller houses/lots being developed. This is already occurring in some communities and is consistent with policies contained within the *Calgary Plan*, encouraging innovative approaches in the design and development of new communities. This will prompt an increase in overall densities, in the variety of housing types, and in the capability for new housing to be integrated beyond the initial buildout of a community *(Calgary Plan 2-2.2.2B)*. The Calgary Plan endeavours to ensure that new communities will work, over time, to achieve a target overall density of 6 - 8 units per gross residential acre *(Calgary Plan 2-2.2.2C)*.

The density of individual communities varies, depending on the mix of housing types (i.e., the proportion of single family/duplex and multi-family units), single family/duplex lot sizes, and the extent of other land uses and amenities within the community, (e.g., local commercial sites, school sites, open spaces and transportation facilities). However, these variations are site-specific and, in terms of their impact on overall land requirements, should not affect the expected timing of utility extensions at the sector level.

Table 2 provides a breakdown of the annual land requirements (city wide demand) associated with forecasted housing demand and the assumed 6.5 units per acre density through to the year 2006. **Approximately 4,540 gross residential acres of land will be required between 2002 and 2006 to support single family/duplex unit development — ranging between approximately 850 and 950 acres per year.** Sections 7 and 9 of this report describe the manner in which the demand for serviced land has been distributed in the past. As well, they forecast the expected distribution of future demand. Tables 13 and 14 provide estimates of the distribution of housing construction and land absorption, by sector, through the five year forecast period.

Residential density is calculated using the following template.

Density = # of houses ÷ Gross Residential Area

Sample Density Calculation

A sample community with 640 acres of total land area, 91 acres of non-developable lands, 106 acres of regional land uses and 3,029 houses (or any kind of dwelling unit), would result in a housing density of 7 units per acre (UPA).

GROSS TOTAL AREA (total land area of community)	640	acres
Less: NON-DEVELOPABLE LANDS	91	acres
Equals: GROSS DEVELOPABLE AREA	549	acres
GROSS DEVELOPABLE AREA	549	acres
Less: REGIONAL LAND USES	106	acres
Equals: GROSS RESIDENTIAL AREA	443	acres
Number of Houses	3,029	houses
Divided by GROSS RESIDENTIAL AREA	443	acres
Equals: DENSITY	7	UPA

Non-developable Lands include:

		(figures for sample density calculation only)
Environmental Reserve	50	
Expressways, TUC, Railways	10	
ROW's	20	
Irrigation Canal, River	1	
Other	10	
	91	acres

Regional Land Uses include:

Senior High School Sites	16
Major Commercial Centres > 7 acres	26
Golf Course	0
Regional Open Space	21
Drive Range	7
Lakes	12
Major Institutional Site(s)	14
Other Regional Uses	10
	106 acres

Gross Residential Area include:

Single Family Residential	230
Multi-Family Residential	10
Local Commercial	13
Elementary & Jr. High Schools & Sites	18
Local Open Space	45
Wet/Dry Ponds & Public Utility Lots	3
Church Sites	2
Daycare Centres/Community Halls	1
Small Indoor Recreation Site(s)	2
Small Site Fire and Police Stations	2
Local Roads & Lanes	117
	443 acres

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Indicators of Market Share, by Sector

Building Permit Statistics

Calgary's Building Permit figures indicate the increase in dwelling units in developing communities and provide one indicator of past market performance. The distribution of this increase in units over the last five years, by sector, is provided in the upper portion of Table 5. The delineation of sectors is illustrated on Map 1.

With respect to single family/duplex new building permits, the Northwest, North and South sectors have been the city's strongest growth areas over the past five years. In combination, these three sectors have accounted for roughly 64% of the new suburban single family/duplex market since 1997. The north half of the city (North, Northeast, and Northwest) has captured 59% of the housing market in the last five years where the south half (South and Southeast) of Calgary has captured 28%. The West with 11% and the East at 2%. In recent years some of the sectors have seen a shift in market shares as new areas have opened up while others such as the East, have virtually no supply remaining. The West sector has been increasing since 1998 with the development of new communities.

The share of total suburban single family/duplex growth achieved in each sector, from 1997 to 2001, is illustrated in Figure 6. The distribution of market share for 2001 is shown in Figure 7.

For multi-family (including apartments and row housing), the West, Northwest and South sectors have continually shown the highest concentration of development , together they accounted for roughly 75% of the new suburban multi-family market since 1997. The Northwest at 28%, the West at 25% and the South at 22% continue to accommodate significant proportions of this development. However, it is important to note that multi-family market shares tend to be less predictable with regard to sector locations than single family.

Building Permit Applications

Market share in the short-term is probably best reflected in the distribution of recent approved building permit applications for new units.

Much of the information presented compares the developing communites relative to the full sector as most of the new growth continues to occur in the developing communities of the city. The communities that are considered to be developing are shown in Map 7.

Table 7 and Figure 8 provide the distribution of single family/duplex building permit applications in 2001 by each sector. The distribution of permit applications for 2001, for the developing communities within each sector, are shown in Table 6 and Figure 9. The location of 2001 single family building permit activity is also illustrated on Map 3.

The lower half of Table 5 shows the market share distribution of building permits for multi-family housing units between the suburbs and the remainder of the city from 1997 - 2001. Comparisons are shown between development activity in the suburban sectors and the remaining Central sector, as well as between developing communities (i.e. those suburban communities currently experiencing construction of new units) and the remainder of the city.

When multi-family housing is defined as including duplexes, apartments and row housing, an average of 64% of new multi-family development occurrred in the **suburban sectors** over the last five years: the remaining 36% occurred in the Central sector. Comparatively, an average concentration of 45% of this same mix of unit types was located in **developing communities**, with the other 55% being developed in the remainder of the city.

The final comparison in Table 5 removes duplexes from the multi-family unit mix over the last five years. The distribution between **developing communities** and the remainder of the city shows a 43% share within the developing communities for the period 1997 - 2001. Over the last few years that average as dropped from 45% (1996 - 2000) and 47% (1995 - 1999).

2002 Developer Survey

Each year The City of Calgary Urban Development Division, surveys the development industry to determine areas where individual developers anticipate undertaking development. The results of the most recent survey are contained in Table 8. The lands referred to in Table 8 are located, generally, on Map 2.

It is important to note that this distribution of market expectations reflects the unique circumstances in each sector with respect to the availability of

serviced land, and not necessarily the expectation of immediate housing construction. The timing and scale of servicing and subdivision expectations often relate to a slightly longer time horizon and may be more directly affected by marketing strategies of individual developers.

Housing Starts

In 2001, there were 9,867 housing starts in Calgary, of which 6,474 (65%) were for single family units. An additional 524 (5%) starts were for duplex units (Table 4).

As indicated in Table 4 and Figure 20, single family/duplex units continue to dominate the new housing market on a city-wide basis. The multi-family share of new housing starts represented 29% of total starts in 2001, with construction starting on 2,871 new townhouse and apartment units. Multi-family growth has been steady, since 1997 as shown in Figure 20.

Residential construction is expected to remain relatively stable at around 8,660 units per year over the next five years. However, comparing net migration to the city over the past five years and looking forward to 2006 the forecasted lower levels of net migration may cause the construction activity to drop slightly from recent levels for both single family and multi-family, as shown in Table 2 and explained on page 5 under "Economic Outlook".

Subdivision Activity - Outline and Tentative Plan Applications

Figure 13 illustrates the number of acres submitted for outline plan approval annually since 1989. An average of 2,100 acres have been applied for over the four year period between 1996 and 1999. More recently over the last two years a sharp increase in the number of acres have been submitted. From a high in 2000 of 4,344 acres and a continuing amount of 3,026 acres in 2001. These two years are the largest number of acres applied for since 1981 (4,482 acres). The year 2001 applications amount to 12.2 square kilometres of land alone.

Slightly down from the two years previous the year 2001 applications for tentative plans do not show the similar proportion of applications to that of Outline Plans. The last three years have been relatively consistant in the number of lots applied averaging 7,041 lots per year. Typically Tentative Plans come on stream much closer to the actual building stage than do outline plans and are not generally comparable.

Figure 14 shows the number of lots submitted annually for tentative plan approval since 1989. In 1998, a fourteen year high of 10,049 lots were applied for. In 1999, 7,307 lots (a steep decrease) were submitted for tentative plan approval. The year 2001 saw a small decrease to 6,380 lots from the year 2000 and 1999 levels. This decrease may in part may be due to high lot availablilty in the market.

8

Land Available for Residential Development, by Sector

Land considered available, as of April 2001, for residential development in the suburban market includes three types of land;

1) Vacant lots in new suburban communities.
2) Land in the process of being subdivided.
3) Those remaining lands which are, as yet, unsubdivided, but which are identified for future residential use.

The status of this supply changes constantly as approved lots are registered and serviced, as construction begins on vacant lots, and as plans are developed or amended. The intent here is to provide an accurate assessment of overall residential land supply, reflecting conditions as of April 2001.

Current Single Family / Duplex Lot Inventory

A detailed estimate was made of the current inventory of single family and duplex lots, both vacant and under construction, in suburban areas in April 2001. Approximately **12,654 vacant lots** existed at that time, including those which were serviced and available to builders, as well as lots recently approved through tentative plans of subdivision. This inventory was similar to the the April 2000 inventory, which totalled approximately 12,352 vacant single family/duplex lots. The supply can accommodate just over two years of residential growth given current and expected demand.

The estimated suburban single family/duplex lot supply, by sector, is detailed in Table 10. The distribution of vacant lots is illustrated in Figure 15.

Vacant Residential Lot Inventory

Historically, data on the number of vacant residential lots has been available from The City's Electric System. Until December 1996, they compiled an annual survey of vacant fully serviced suburban residential lots **(with shallow utilities in place)**. This source has been replaced with information from the Calgary Chapter of the Urban Development Institute (U.D.I.).

Annually, since January 1997, they have compiled a survey of vacant suburban residential lots which may or may not have shallow utilities in place. In January 2002, there were approximately 8,146 serviced, vacant lots, as shown in Table 11 and Figure 16. The inventory over the last four years has been relatively stable between 7,700 and 8,200 lots.

Unsubdivided Residential Land Supply

The current unsubdivided suburban residential land supply is indicated, by sector, in Table 12. The distribution of that land supply is shown on Figure 17. **As of April 2001, there were an estimated 13,740 gross residential acres intended for residential and related uses. Given lot counts from approved outline and tentative plans for both single family/duplex and multi-family units, as well as density midpoints of Comunity Plans, these lands could accommodate approximately 89,850 new residential units, a 15 to 18 year supply given Table 13 projected growth rates.** Map 6 shows the unsubdivided residential land supply for the entire city, while detailed maps of the residential land supply, by sector, are contained in Appendix II.

This inventory does **not** include large areas for which future land use policy has not yet been developed. These excluded areas are shown in Appendix II (Grey areas). They will continue to be excluded from the residential land inventory until policy plans are in place and/or more extensive technical analysis is undertaken to determine the likely developable residential components.

The lands included in the inventory are classified according to the availability or capability of water and sewer (storm and sanitary) services, as this infrastructure must be in place before development can proceed.

Areas classified as **"Fully Serviced"** have been classified in the past as "Utility Capacity in Place" and indicate that major utility services have either been installed or will be provided by the developers without major City expenditures, although the land is currently neither subdivided nor developed with on-site services. This means that the lands have the capacity to handle development. The two remaining classes describe lands with **some**, but not all, utility capacity in place **(Partially Serviced)** or lands having **no** capacity in place **(Unserviced)**.

In Appendix II, lands within each sector are mapped according to servicing status. These servicing maps **do not** take into account the availability of downstream transportation capacity, which is discussed throughout the text, nor do they indicate the costs to construct the required services. **It cannot be assumed that areas classified as "Partially Serviced" are necessarily less costly to service (including transportation**

infrastructure) than those areas considered "Unserviced". Their relative cost depends very much on the unique circumstances in each area. In light of this, the coding of these two categories should not be construed to imply the intended sequence of development. Generally, servicing costs and attractiveness to the market have been the main determinants of when individual areas are brought on-stream. More specific information about servicing thresholds/budgets/constraints/sequencing will be provided through the Growth Area Management plan (GRAMP) currently in preparation.

As noted above, transportation requirements may impose a further constraint on development, but the extent of constraint may vary from situation to situation. Although the required transportation facilities may be substantial in some situations, there is a greater degree of flexibility in the timing of the expenditures. Transportation facilities are not generally required in their final form until substantial development has occurred. Notwithstanding this, it must be emphasized that some of the areas discussed below, while having all or some utility capacity in place, may also have major transportation constraints which affect their developability in the 2002–2006 period (refer to Section 9).

It should also be noted that although The City may not be responsible for constructing major servicing projects in areas with utility capacity in place, it will still need to budget for "oversize" costs associated with specific transportation and utility improvements constructed by individual developers. "Oversize" costs are recovered from developers and in the case of transportation costs, they are recovered by means of major road assessments upon new developments.

Finally, it is noted that this servicing analysis **does not** take into account the related need for other public facilities (e.g., recreation facilities, libraries, fire stations) or services (e.g., transit, police, fire, EMS, social services) also required to support growth in a specific area. More specific information about facilities and services will be provided through the Growth Area Management Plan (GRAMP).

"Fully Serviced": Areas with Utility Capacity in Place

With the exception of the East sector, a supply of land exists in each sector which is immediately developable, with capacity in the system to develop with water and sewer (storm and sanitary) facilities in place. These areas are shown in **"green"** on the maps included in Appendices I and II.

These lands are not, as yet, subdivided, nor do they have local "on-site" services in place. There is, however, capacity in the utility "system" to accommodate their development without requiring significant City expenditures for major trunks, watermains, reservoirs, etc. In this sense, they are considered to be "Fully Serviced" with utility capacity in place. Of these areas, those with specific transportation system constraints are identified in Section 9.

These areas represent approximately 6,655 acres, of which 313 acres are identified for multi-family use. **In total, areas with utility capacity in place in 2001 could accommodate approximately 39,000 single family/duplex units and 6,800 multi-family units, in other words a six to eight year supply of residential growth.** (See Table 12 and Figure 18.)

Although each of these areas, in isolation, could develop without major expenditures for water and sewer lines, **the cumulative effects of simultaneous development in all of these areas could result in a need for improvements in the facilities.** Additional capital projects (treatment plants, reservoirs, etc.) will be required to meet increases in city-wide service demands as the city grows. **Full development of many of these areas will also require major transportation improvements and provision of a variety of necessary public facilities and services.** It is intended that these cumulative requirements will be identified and monitored through the Growth Area Management Plan (GRAMP) process.

"Partially Serviced": Areas Having Some Utility Capacity in Place

In the areas considered as "Partially Serviced" some utility capacity exists (identified in **"yellow"** in Appendices I and II), and some **capacity exists in at least <u>one</u> major municipal utility (storm sewer, sanitary sewer or water).** In each instance, additional capital expenditures are required by The City before large-scale development can commence. **The areas designated as "Partially Serviced" total approximately 4,745 acres** (up from 2,994 in 2000) **and could accommodate approximately 29,600 units.**

The full development of many of these (yellow) areas, on a sector basis, will require major transportation expenditures.

"Unserviced": Areas Having No Utility Capacity In Place

The third category of lands (shown in **"red"** in Appendices I and II) includes all of the remaining unsubdivided lands which are identified through Policy Reports, Area Structure Plans and Community Plans (either approved or in preparation), and are identified in *The Calgary Plan*, as being suitable for future residential land use. **These lands represent approximately 2,300 acres in total** (down from 6,100 in 2000) **and could accommodate approximately 14,100 units.**

The full development of these areas will require major transportation improvements.

9

Probable Supply/Demand Conditions, By Sector

The purpose of this report is to examine, on an annual basis, the expected fit between residential land demand and supply over the coming five year period. **The intent is to identify whether a sufficient supply of readily developable land exists, in a variety of locations, to facilitate competitive land and housing markets.** The comparison of supply and demand is based upon a set of assumptions regarding the level of population growth, the character of housing demand and the expected distribution of that demand among the competing growth corridors. As the market changes, these assumptions can be expected to change as well.

Section 7 of this report provides a basis for estimating the expected market share of single family/duplex housing starts in the short-term, although **it is recognized that major shifts in activity can and do occur from time to time as a result of individual developers opening up or completing particular subdivisions.**

Table 13 provides estimates of the number and distribution of new single family/duplex starts, by sector and for the developing communities, over the 2002–2006 period. This distribution, by sector, is illustrated in Figure 19. Table 14 estimates the annual demand for residential land, in each sector, and relates these demand forecasts to the existing inventory of unsubdivided lands considered "Fully Serviced". Supplementary information related to the rate of development, land supply, and remaining housing and population capacity within the individual communities in each sector is contained in Appendix II. Since much of this document deals with the new developing growth areas, information specific to these areas is provided throughout this document. Table 13 estimates these needs for the developing communities as typically the majority of growth is in these areas.

Map 8 provides an overall view of the possible distribution of both housing growth (approximately 27,400 single family/duplex and 5,900 multi-family units) and population growth within developing areas over the next five years, based on the assumptions and forecasts outlined in this report. It also recognizes the importance of areas where strong developer competition exists and is considered as a factor in the allocations of land needs.

It should be recognized that **this report does not address the downstream transportation impacts generated by suburban growth**. Many downstream intersections are currently at capacity and failing during peak periods. Map 5 in Appendix I shows locations of capacity problems at signalized intersections where one or more movements are at failure during one or both peak periods.

North

Existing Supply:

- The North sector has accounted for a 18% share of the new single family/ duplex market since 1997, with development occurring mainly in Country Hills, Coventry Hills, Harvest Hills, Hidden Valley, and Panorama Hills. As can be concluded from Table 5 and Figure 6, on average, the sector has added 1,208 single family/duplex units per year over the past five years. Figure 7 indicates that more recently, the sector accounted for 13% of the suburban single family/duplex market growth in 2001, adding 900 units through new building permit applications (Table 7, Figure 7).

- As of April 2001, the North sector had an inventory of 1,523 vacant single family/duplex lots and 695 acres of unsubdivided land considered "Fully Serviced" with utility capacity in place. This would accommodate an additional 4,210 single family/duplex units roughly a five year supply at current forecast needs given Table 13 projected growth rates.

Demand Assumptions:

- With the inclusion of the Symons Valley area last year into the North Sector and the availability of more lands it can be expected that the sector will start to regain more of the market share traditional to the area. The last few years has seen a significant reduction in growth from past trends. Market share for the area had been as high as 24% in 1997 but more recently having dropped to 14% in recent years. Recent servicing solutions should help to improve the areas growth potential.

- Additionally, with the start up communities of Symons Valley and Evanston, this should help provide new growth options to the area as these communities begin to build. Typical slow growth in the first few years of most new areas should give way to more sustained and steady growth over the following years which should result in and increasing market share in the sector.

- It is expected that the sector's market share will start to increase in 2003 and continue to climb to approximately 20% by 2006. The five-year average will support an approximate 17% to this area. In total this should represent approximately 4,640 units or 900 to 1,000 single family/duplex houses per year (Table 13).

- Residential demand is expected to pick up around 2003 and beyond. In the meantime, increased growth in the communities of Coventry Hills and Panorama Hills is expected as communities in the Northwest sector build out and some of that demand moves into the North sector. The Hamptons, Citadel, Arbour Ridge and Valley Ridge are expected to be built out within the 2002-2003 timeframe with some of the market share going to the remaining Northwest communities of Rocky Ridge, Royal Oak and Tuscany.

Influencing Factors:

- Stoney Trail will be built by the Province as a minimum two lane road between Country Hills Boulevard and Beddington Trail in 2008 and between Beddington Trail and Deerfoot also in 2008.

- Improvements to McKnight Boulevard between Edmonton Trail and 4 Street West from four to six lanes in 2004-2005.

- Improvements to 16 Avenue North between 6 Street and 10 Street West from four to six lanes in 2003 -2005.

- Access to the area should remain relatively good, due to the 1999-2000 provision of upgraded road infrastructure such as widening of Country Hills Boulevard. The interchange at Deerfoot Trail and Country Hills Boulevard supports substantial traffic and has experienced significant delays. The Province is currently undertaking construction to improve the interchange and the completion date is Spring 2002. This includes twinning the existing bridge and two loop ramps.

- The Province has finished the upgrade of the interchange at 96 Avenue and Deerfoot Trail.

- Beddington Trail/Symons Valley Road will provide the primary road access to the Symons Valley community in the first few years of development.

Northeast

Existing Supply:

- The Northeast sector has achieved an average single family/duplex market share of 12% since 1997 (Table 5 and Figure 6). On average, the sector has added 818 single family/duplex units per year over the last five years. In 2001, the Northeast accounted for 16% of the suburban single family/duplex market or 1,071 new units (Table 7, Figure 7). This increase partially reflects a capacity of serviced land to the balance of the subdivided land in the sector. The good supply of serviced land has assisted in the increased market share from 10% in 1998, 13% in 1999 and a high of 16% in 2000 and again in 2001. The Northeast sector also absorbed some of the market share from the building out of the East sector.

- As of April 2001, the Northeast sector had a total inventory of 1,734 vacant single family/duplex lots and 1,011 acres of land considered "Fully Serviced" with utility capacity in place. The sector is able to accommodate 7,000 additional single family/duplex units. This could accommodate nine to ten years worth of growth given Table 13 projected growth rates.

- Development is ongoing in Saddleridge, Martindale, and Taradale.

Demand Assumptions:

- The last two-year's growth in this sector has increased to the highest levels seen in well over five years. With no further significant growth in the East Sector those market shares have moved entirely into the Northeast Sector adding to higher than traditional levels in this area. In addition the last few years of slower growth in the North may have had some effect and shifted some shares to the Northeast.

- With the good supply of serviced land capacity the sector can sustain these relatively higher levels for a few years while the North Sector begins to pick up. Generally, growth in the area will likely level off slightly around 2004 and fall to more historical levels. The average growth over the next five years is expected to be approximately 14% of the city's total share of new residential growth. This would add approximately 3,900 new units to the area or 780 new single family/duplex units per year (Table 13).

Influencing Factors:

- Pressure on McKnight Boulevard has been eased with the completion of the new 96 Avenue NE connection from Deerfoot Trail to the Airport.

- Improvements to 36 Street NE from a two lane to a four lane road between McKnight Boulevard to 64 Avenue NE will be done in 2002-2003.

- McKnight Boulevard will be twinned to create a four lane road between 52 Street NE to 68 Street NE in 2003.

- The Northeast LRT will be extended two kilometres along 36 Avenue, from the Whitehorn station to the new proposed Prairie Winds station with construction in 2004-2006.

- Barlow Trail between the Trans Canada Highway and 39 Avenue North with an additional south bound lane has been completed in 2001.

- Sour gas facilities may have a strong affect on the use, configuration and development of land in the sector.

East

Existing Supply:

- The East sector has achieved an average single family/duplex market share of 2% since 1997 (Table 5 and Figure 6), with development occurring in Applewood Park and Erin Woods. Essentially the sector has built-out over the last year and presently there is no residential land supply remaining.

Demand Assumptions:

- It is expected that the sector will capture a 0% market share over the next five years.

Influencing Factors:

- Twinning of 68 Street East from a two lane to four lane road between Memorial Drive and 17 Avenue SE in 2004.

Southeast

Existing Supply:

- The Southeast sector has achieved an average 13% share of the suburban single family/duplex market since 1997 (Table 5 and Figure 6), or approximately 875 units per year. More recently, the sector accounted for 10% of the market in 2001, adding 646 new units through building permit applications (Table 7, Figure 7). Since 1997 the share has dropped from 19% to a low of 9% in 2000. Currently the last five year average for the sector sits at 10%. The explanation for the downward trend is primarily due to the build-out of McKenzie Lake and Douglasdale and the slower early stages of Cranston. As with most new developing communities, initial start up is typically slow but the sector is expected to pick up as Cranston develops. McKenzie Towne after a similar start is now showing improved levels of growth.

- Development is ongoing in Cranston, and McKenzie Towne.

- As of April 2001, the Southeast sector had a total inventory of 1,010 vacant single family/duplex lots and 2,107 acres of land considered "Fully Serviced" with utility capacity in place, able to accommodate 13,889 additional single family/duplex units. This translates into well over ten years of supply based upon Table 13 projected growth rates.

Demand Assumptions:

- The last four years have shown slower than expected growth but the sector is expected to increase its market share in the next five years and beyond. This sector has had the slowest levels of residential growth of all sectors, 9% in 2000 and 10% in 2001. This can be somewhat explained by the completion of Douglasdale, Douglasglen, Riverbend, and McKenzie Lake communities and the typical slow initial starts of new communities such as Cranston. As development in the new communities of Copperfield and New Brighton and Cranston continues to pick up, more traditional sector shares should occur.

AVERAGE MARKET SHARE, 2002 - 2006

- The sector is expected to accommodate approximately 11% of the market shares city wide through to 2006, adding 3,100 single family/duplex units or 620 units per year. Long term shares for the sector have been higher and movement in this area is expected to be climb to 12% after 2003 with increasing shares beyond the 2006 forecast period (Table 13).

Influencing Factors:

- Interchanges are operational and completed along Deerfoot Trail at Barlow Trail and Marquis of Lorne Trail.

- Two additional interchanges will be constructed by the Province along Deerfoot Trail at McKenzie Lake/Towne Boulevard (December 2003) and 130 Avenue (completion 2005).

- The Province will extend Deerfoot Trail as a new four lane road south of Marquis of Lorne Trail to Highway 2 in 2003. An interchange will also be constructed at 196 Avenue. The City is cost sharing the south extension with the Province.

- The widening (two lane to four lane) of Glenmore Trail between 52 Street SE to East Freeway (Transportation/Utility Corridor) with anticipated completion in 2003.

- Marquis of Lorne Trail will be twinned between Deerfoot Trail and Macleod Trail in 2005 to 2007.

- Development of areas south of Marquis of Lorne Trail and east of the

Deerfoot Trail extension will require interchanges on Deerfoot Trail at 196 Avenue SE.

- 52 Street East from Glenmore Trail to 13 Avenue South will go from two to four lanes in 2004-2007.
- Glenmore Trail from Ogden Road to the Bow River will be upgraded from four to six lanes in 2003-2004.

South

Existing Supply:

- The South sector has accommodated a 17% share of the single family/ duplex market growth since 1997, adding 1,109 single family/duplex units per year, on average. The sector's share was 16% for 2001, adding 1,097 units through new building permit applications (Table 7, Figure 7).
- As of April 2001, the South sector had a total inventory of 1,935 vacant single family/duplex lots and 613 acres of residential land considered "Fully Serviced" with utility capacity in place, able to accommodate approximately 4,048 additional single family/duplex units, roughly a five year supply given Table 13 projected growth rates.

Demand Assumptions:

- The communities of Millrise, Shawnessy, and Somerset are expected to be built-out over the next five years with Chaparral soon after. The communities of Bridlewood and Evergreen will be the predominate areas for future growth in this area. The approval and construction of the 37 Street bridge and upgrades in 2004, as well as the LRT extention to 146 Avenue will help in the further development of the area.
- Overall, the sector is expected to account for approximately 16 % of the single family/duplex market over the five year period, or an average of 880 units per year. With some key transportation issues resolved in the area and servicing options coming on stream in the next few years the sector should maintain its share at around 16 %. This is a slight drop from the higher levels in the last few years and is somewhat related to the higher levels expected in the Southeast sector as it's increase begins to show.

Influencing Factors:

- The construction of the 37 Street SW Bridge (three lanes over Fish Creek) is to occur in 2004 to 2005. This will link Anderson Road and 146 Avenue in 2004. The road will be two lanes with climbing/left turn lanes as part of its first stage.

- Anderson Road between 24 Street and 37 Street west will upgrade from two lanes to four lanes. Construction to begin in 2005.

- Improvements to 14 Street between 90 Avenue and Anderson Road will go from four lanes to six lanes in 2005.

- The south LRT extension to 146 Avenue is completed, with the further extension to 162 Avenue to be completed in 2003.

- Short-term growth in Chaparral will require a new intersection on Macleod Trail at 194 Avenue. The intersection is at the City limits and is controlled by the Province. The Province has approved a traffic signal at this location. Installation of signals and intersection improvements in 2002.

- Upgrades along 14 Street between Anderson Road and Canyon Meadows Drive will provide four lanes in 2005.

- The Glenmore Trail and Elbow Drive interchange will occur between 2003 to 2005.

West

Existing Supply:

- The West sector in the last two years has had a increasing share of the suburban single family/duplex market. In 1997 the sector achieved only a market share of new single family/duplex of 6%. More recently, the sector achieved a 15% market share in 2000, and hit a high of 17% in 2001, adding 1,147 single family/duplex units through new building permit applications (Table 7, Figure 7).

- As of April 2001, the West sector had a total inventory of 3,022 vacant single family/duplex lots and 815 acres of land considered "Fully Serviced" with utility capacity in place, able to accommodate an additional 4,054 single family/duplex units or approximately a five year supply based upon Table 13 projected growth rates. However, significant water servicing upgrades and construction are required in the area before the full development of this supply can be fully built out. A reservoir is required to be located to the west of the existing City limits. This would also require feedermains along Old Banff Coach Road. Details are listed in the "Servicing Implications" section of this report.

Demand Assumptions:

- There exists a broad variety of housing choice with development continuing in Strathcona, Discovery Ridge, West Springs, Signal Hill, Cougar Ridge, Crestmont, Aspen Woods and Springbank Hill. It is expected that, due to the extent of choice, single family/duplex demand in the sector will increase to an average of 15% through to 2006, or approximately 840 new houses per year.

- As many of the communities in the Northwest sector build-out within the next 10 or more years it is expected that some market share will continue to move into the West sector. Given this, the market share over the next five year period should continue to reflect the recent higher levels and possibly even higher levels of growth as servicing options are completed.

Influencing Factors:

- The upgrading of 69 Street SW to a major standard road from Highway 8 to 34 Avenue SW is complete.

- The City is constructing the extension of Bow Trail from Old Banff Coach Road to 85 Street NW. As well, Old Banff Coach Road west of 69 Street SW is being upgraded.

- Glenmore Trail will be widened from a four lane road to a six lane road between Crowchild Trail and Sarcee Trail between 2004-2005.

Northwest

Existing Supply:

- The Northwest sector remains the city's largest and strongest growth corridor, averaging a 27% share of the new single family/duplex market or 1,811 units per year, since 1997 (Table 5 and Figure 6). The sector continued to maintain strong market shares of 28% in 2000, 27% and in 2001, adding 1,838 single family/duplex units through new building permit applications (Table 7, Figure 7).

- As of April 2001, the Northwest sector had a inventory of 3,330 vacant single family/duplex lots and 1,166 acres of land considered "Fully Serviced" with utility capacity in place, able to accommodate roughly 6,099 additional single family/duplex units. This builds out the sector in approximately seven to ten years.

Demand Assumptions:

- The Northwest sector has been the strongest growth sector in the city over the last ten years or more. However, the available residential land supply is diminishing. With the completion of five communities over the next five years (Arbour Lake, Citadel, Edgemont, The Hamptons, and Valley Ridge) only three communities will have further residential capacity: Royal Oak, Rocky Ridge and Tuscany.

It is expected that activity in the sector will remain strong over the forecast period, averaging 26% of the single family/duplex market, or about 1,440 units annually. However, with the reduction in available choice and the build out of many of the communities, a general decline in market share should be expected for the sector later in the forecast period and further into the following six to ten years.

- The existing inventory of serviced land should be sufficient to accommodate expected demand throughout the five year forecast period and beyond.

Influencing Factors:

- Crowchild Trail will be widened from four lanes to six lanes between 53 Street and Rocky Ridge Road in 2004 and 2005.
- Shaganappi Trail will be twinned from two lanes to four lanes between Country Hills Boulevard and Edgemont Boulevard in 2004.
- Stoney Trail will be built by the Province as a minimum two lane road between Country Hills Boulevard and Beddington Trail in 2008.
- Construction is ongoing for the extension of LRT to 53 Street/Dalhousie Station, including a Park 'n' Ride lot. The construction of interchanges on Crowchild Trail at Brisebois Drive, Northland Drive and 53 Street NW is planned for 2001 and 2003.
- Upgrades to the Trans Canada Highway/Valley Ridge Boulevard interchange have been completed, including widening a section of Trans Canada Highway from Valley Ridge Boulevard to Bowfort Road to six lanes. This widening has relieved congestion from traffic coming from the West and Northwest sectors.
- An agreement is in place to stage upgrading of Rocky Ridge Road from two to four lanes, and to construct CountryHills Boulevard from Rocky Ridge Road to Stoney Trail.

10

Servicing Implications

The Need For Utility Extensions

The serviceable residential land supply, that is, the existing inventory of vacant single family/duplex lots and the unsubdivided areas considered "Fully Serviced" with utility capacity in place (the green areas in Appendices I and II), together provide enough capacity for an estimated 51,900 single family/duplex units or approximately 150,000 to 160,000 people. **These lands should provide sufficient inventory to accommodate expected city-wide demand through the five year forecast period. However, there will be serviced land shortages in particular sectors within the next five years. Extension of City utilities will be required if these sectors are to continue developing.**

The timing of utility extensions is to be reviewed in the context of the policies contained in the Calgary Plan. The following specific policies provide the basis for this review:

- *The City will endeavour to accommodate growth while at the same time attempting to avoid premature investment in municipal infrastructure (2-2.2.2.1G).*

- *Make decisions on capital expenditures relating to the extension and/or upgrading of municipal water, storm, sanitary, and transportation systems, through the normal budgeting process and after consideration has been given to: the overall capital cost implications of the extensions, including*

  - *the cost of other services The City provides;*
  - *the municipality's financial capability;*
  - *existing market conditions and anticipated demand as they relate to the proposed expenditure; and*
  - *the impact of these decisions on the provision of gas, electric, telephone and cable services. (2-2.2.2.1I)*

- *Evaluate actual expenditure decisions related to the construction of municipal infrastructure through The City's Short-Term Growth Management decision-making process. (2-2.2.2.1H)*

The Short Term Growth Management Strategy (approved in February, 1985) indicates that, through its normal planning and budgeting processes, The City will endeavour to incorporate sufficient lead times so that it can be in a position to construct the municipal infrastructure required to provide the supply of serviced land determined to be necessary under *Calgary Plan* policy 2-2.2.2.1l.

On the basis of the forecasts and allocations contained in this report, and if a reasonable supply of land considered "Fully Serviced" with utility capacity in place is maintained in each sector, The City should consider undertaking or facilitating utility extensions over the next five years in the following sectors:

Sector	Probable Year in Which Utility Extensions Will be Required	Utility Extensions Required to Service Areas Considered "Partial Serviced" (Yellow Areas)
North	2002-2003	Water and Storm
Northeast	---	---
East	---	---
Southeast	after 2006	Storm
South	2003-2004	Water, Storm, Sanitary
West	2002-2003	Water and Storm
Northwest	2002	Water

**Utility extensions listed here do not identify those required within the timeframe indicated in the previous column. It cannot be assumed that "yellow" areas will be developed before "red" areas (areas with no capacity in place).

Notwithstanding the overall availability of serviced land, it is expected that requests to extend utilities and transportation services into new areas will continue to be made.

Implications of the "Serviceable" Land Supply

In dealing with shortages of land supply in a particular sector, Council may or may not choose to expend funds to service new lands, given the availability of serviced land in other sectors. All scheduled budget information is tentative and subject to final City Council approval for each year's budget. In considering funding, the following implications should be taken into account.

- The development of those areas shown to have major utility capacity in place offers several benefits, including:

  - minimizing the assumption of new debt by The City in accommodating growth in the short-term (i.e., not contributing to an increase in the existing debt/capita ratio);

- reducing pressures on The City's operating budgets in terms of debt servicing and overall operating efficiencies and;

- On the other hand, limiting development to those lands having utility capacity currently in place may not satisfy all of the requirements of the marketplace with respect to:

  - providing a sufficient number of locational choices for each market segment;

  - providing a readily developable supply in each sector.

- In addition, there may be other factors which influence the need for, or the timing, of service extensions in particular areas and which are not strictly related to local demands for residential land. For example, specific service extensions may also satisfy demands for non-residential uses, such as industrial development, or resolve existing servicing problems in the sector.

  It is within the context of these divergent interests that The City's growth management processes must:

  - provide a context for setting the budgeting priorities of each service department in relation to a shared view of the development pattern expected to emerge over the coming five year period; and

  - provide current information upon which Council can respond to the requests of individual landowners situated beyond the fully-serviced areas.

The Short-Term Growth Management Strategy provides mechanisms through which Council can balance these varying interests in a consistent and rigorous way.

This Strategy also serves as the basis for developing cost-sharing agreements on the extension of services into new areas. Specifically, cost-sharing arrangements between The City and developers have been approved for:

- Country Hills Boulevard NW extension;
- Harvest Hills (transportation improvements);
- Panorama Hills (transportation improvements at Country Hills Boulevard/ Deerfoot Trail interchange);
- Martindale (sanitary and storm sewers);
- McKenzie Lake and McKenzie Towne (sanitary and storm sewers);
- Shawnessy/Somerset (storm sewers and transportation);
- Patterson Heights (sanitary and storm sewers);
- Strathcona Cell H (sanitary and storm sewers);
- Arbour Lake (storm sewers);
- Crestview (waterworks);
- Crowchild IV/Hamptons (transportation improvements);
- Rocky Ridge (sanitary and storm sewers and transportation);
- Valley Ridge (sanitary sewers and transportation);
- West Scenic Acres/Tuscany (sanitary and storm sewers and transportation improvements); and
- Royal Oak (waterworks).
- 37 Street Bridge & related upgrades (transportation and storm sewers)

Servicing Implications By Sector

This section briefly describes the major **utilities needed** to service future residential development in each sector (the "yellow" and "red" areas shown on Maps 1 to 7 in Appendix II). Notwithstanding the identification of these infrastructure requirements in this report, there is no assurance that individual elements will actually be constructed in the short-term, as a result of capital funding constraints.

North Sector

Coventry Hills and Panorama Hills:

Sewers:

- The "yellow" area in Coventry Hills requires the construction of a new storm outfall to Nose Creek with a new trunk along with upgrades to the existing system. Alignment for the trunk has yet to be determined. It is anticipated that the North Beddington Storm Trunk will be constructed by the developer in 2003. Financing arrangements with Wastewater & Drainage have yet to be finalized.

- Development of the "yellow" areas in Panorama Hills requires extension of the North Beddington Sanitary Sewer Trunk by the developer in 2002-2004.

Waterworks:

- Initial development in the "yellow" area also requires construction of the Spyhill North Pump Station in 2002 and the Spyhill Feedermain on 112 Avenue also scheduled for 2002. Ultimate development of the "yellow" area in Panorama Hills will require feedermain extensions on 4 Street and 144 Avenue NW.

Symons Valley:

Sewers:

- Wastewater & Drainage has budgeted in 2002 and 2003 to pay back the developers for construction of the Beddington Creek 2 Sanitary Trunk and a regional lift station. Construction to begin in 2002.

- Stormwater drainage will be diverted to West Nose Creek, with storm

water retention facilities and pipes being constructed by developers.

Waterworks:

- Waterworks can service the initial phases of Symons Valley through the Spyhill East Feedermain that will be constructed on 112 Avenue in 2002. Servicing of the westerly portions of Symons Valley, above the 1,190 m contour (Top Hill and Nose Hill pressure zones), can occur through distribution main extensions across the Transportation/Utility Corridor (TUC).

- Symons Valley will not have full utility capacity until the Spyhill North Pump Station is built in 2002 and a feedermain is constructed between the pump station and the existing feedermain at Symon's Valley Road, immediately south of 112 Avenue. These facilities will be required to service development in the Spyhill Pressure Zone. A feedermain extension on Symons Valley Road will be required to support development along the western edge of the Spy Hill Pressure Zone.

- The area above the 1148 m contour (Big Hill Pressure Zone) requires a feedermain extension on Sarcee Trail and a reservoir near the city limits to the north.

North Sector Overall:

- Long-term growth in the North and Northeast Sectors will require construction of the Big Hill East reservoir (to be located on the western edge of Nose Hill Park), in conjunction with the phased extension of the Shaganappi Trail Water Feedermain between the Big Hill Pump Station and the Beddington Reservoir.

Northeast Sector

Waterworks:

- The 60 Street NE Feedermain Phase 1 is planned for construction as development extends to the North (construction to time with the phasing of new housing development). The Phase 2 Feedermain will be constructed in 2004).

East Sector

East Sector Overall:

- No further additions to the residential land base are expected for this sector in the short to medium-term.

Southeast Sector

McKenzie Towne:

Sewers:

- Build-out of portions of the area will require extension of a sanitary sewer trunk as part of the proposed New Brighton and Copperfield subdivisions. Servicing will be via lift station pumping back to the McKenzie Trunk. Only portions of these subdivisions will be approved for development until such time as the Shepard storm system is available (wetland physically constructed). Financing arrangements with Wastewater & Drainage may be required to be negotiated.

Cranston:

Sewers:

- Full development of the area will require storm and sanitary infrastructure.

- The developer funded sanitary trunk for this area will be directed to the future Pine Creek Wastewater Treatment Plant (Phase 1) which is expected to be operational by 2006.

Waterworks:

- Full development of the area will require water transmission (City supplied main feedermains) system improvements, including feedermain extensions, a new reservoir and a new pump station.

Southeast Cell A (East of Cranston):

Sewers:

- Initial development of the area requires storm and sanitary infrastructure.

Southeast Sector Overall:

- Pine Creek Wastewater Treatment Plant will be designed in 2003 and construction for Phase 1 will occur between 2005 and 2006. The plant is to be operational by 2006.

- The Deerfoot Feedermain will be constructed to 196 Avenue in 2002.

South Sector

Chaparral:

Waterworks:

- The Macleod Trail Feedermain Phase 1, servicing growth in Chaparral and located between 162 Avenue SW and Marquis of Lorne Trail, is budgeted for construction in 2005. This is required to reinforce the distribution network in the Chaparral area.

Somerset, Bridlewood, Evergreen:

Sewers:

- The area will require extension of the Midnapore Sanitary Sewer Trunk along 162 Avenue SW to 24 Street SW. A new storm trunk will be required to service the Fish Creek / 37 Street Storm Catchment. Financing arrangements between the developer and Wastewater & Drainage may be required.

- The area will also require the extension of a new storm outfall to Fish Creek, subject to Provincial approval and resolution of financing. Wastewater & Drainage have tentatively budgeted to construct the Fish Creek / 37 Street Storm Trunk in 2004 and 2005.

Waterworks:

- The area will require the construction of a water pump station before development can proceed. Water distribution main extensions or feedermain extensions will also be required. Waterworks will design the Evergreen Ridge Pump Station in 2004 and plan to start construction in 2005. Ultimately a feedermain and reservoir will be required to serve the built out Westview pressure zone.

- Growth in this sector, west of Macleod Trail will require an additional reservoir cell at the Lower Sarcee Reservoir site to reinforce the Lower Sarcee Reservoir District. Waterworks plans to construct the Lower Sarcee Reservoir in 2005.

- A water feedermain in Evergreen, within the Lower Sarcee pressure zone, will be required for further development to the south.

South Sector Overall:

- Pine Creek Wastewater Treatment Plant will be designed in 2004 and construction will occur between 2005-2007. The Pine Creek Sanitary Trunk from the Fish Creek Wastewater Treatment Plant will run on the west side of the Bow River and is expected to be completed on the same schedule as the plant.

West Sector

Calgary West & Cougar Ridge:

Sewers:

- Cougar Ridge storm servicing is extended from the Bow River and a new outfall has been constructed. Sanitary servicing is also in place.

Waterworks:

- A water feedermain extension, across the Bow River, is required to extend south into Calgary West. A water feedermain extension is required along Bearspaw Dam Road in the Northwest Sector prior to the above noted river crossing being in place. A new reservoir with a pump station is required to reinforce the network in Calgary West and to provide service to the 1,248 m contour (Broadcast Hill Pressure Zone). Above 1,248 m, requirements for water servicing have not been determined.

- Waterworks plan to construct the Old Banff Coach Road Feedermain Phase 1 in 2004 and 2005.

West Springs, Aspen Woods, Springbank Hill, Discovery Ridge:

Sewers:

- Wastewater & Drainage have budgeted to payback developers for the construction of the 69 Street Storm Trunk in 2003.

- The storm sewer through Discovery Ridge to Highway 8 has been constructed. Alignment for storm and sanitary sewer in the 85 Street SW right-of-way north of Highway 8 has been finalized. Wastewater & Drainage has budgeted for the construction of the 85 Street Sanitary Trunk in 2002. Budgeting for this storm sewer is currently beyond the ten-year window

- The 101 Street SW catchment area will require a new storm trunk and other storm water management facilities.

Waterworks:

- The Broadcast Hill and Strathcona water pressure zones (above 1,169 m) can accommodate a total population of 28,000. Above 28,000 people, a reservoir is required to be located to the west of the existing City limits. This would require feedermains along Old Banff Coach Road. The 2001 Civic Census presently shows a population of 21,778 in these areas.

- A Pressure Reducing Valve Station is required on 85 Street at Glenmore Trail SW for the continued development of Discovery Ridge.

- Waterworks plan to construct the Discovery Ridge Flow Control Station in 2002.

- The Glendale and West Calgary water pressure zones can accommodate development below the elevation of 1,169 m between 69 Street SW and the eastern edge of the major ravine in Sections 3 and 10 of Township 24, Range 2, west of the Fifth Meridian. Development west of this ravine will require connection to an existing transmission/distribution system in the upper Broadcast Hill/Strathcona zones, including Flow Control Stations. A feedermain extension on 69 Street and 17 Avenue to 85 Street will also be required.

Northwest Sector

Rocky Ridge, Royal Oak:

Waterworks:

- A feedermain extension on 112 Avenue and Rocky Ridge Road NW to the pump station is required for ultimate servicing. Waterworks plans to construct the Research Park Feedermain in 2005.

- Growth in this sector, west of Stoney Trail and north of Crowchild Trail, will require an additional reservoir cell at the Top Hill Reservoir site to reinforce the Top Hill Pressure Zone. Waterworks plans to construct the Reservoir in 2001-2002.

Tuscany, Valley Ridge:

Waterworks:

- Full development of the "green" area, south of the Bow River, below the elevation of 1216 m, will require a water feedermain extension from the Bearspaw Water Treatment Plant to the south through the Valley Ridge area. Tuscany water feedermain ties to the proposed feedermain on Bearspaw Dam Road, and extends north on 109 Street NW.

- Planned projects are the Tuscany Feedermain Phase 2 in 2003 and the Valley Ridge Feedermain Phase 1 and 2 in 2005.

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Short-Term Population Projections 2002 - 2006 **Table 1**

Year	Projected Net Migration	Projected Population
2001 (Actual)	7,991	876,519
2002	13,400	896,800
2003	8,200	912,000
2004	7,200	926,400
2005	11,300	945,000
2006	11,000	963,300
Total	51,100	

Source: Corporate Strategy & Economics, 2001

Forecasted Population and Housing Growth 2002 - 2006 **Table 2**
City Wide Forecasts (For Single Family/Duplex and Multi-Family Units)

Year	Population	Single Family/Duplex Units	Multi Family Units	Gross Acres of Residential Land Required @ 7 U.P.A.*	**@ 6.5 U.P.A.***	@ 5 U.P.A.*
2001 Actual	876,519	5,447	2,990	780	840	1,090
2002	896,800	6,470	3,030	920	1,000	1,290
2003	912,000	5,789	2,711	830	890	1,160
2004	926,400	5,653	2,647	810	870	1,130
2005	945,000	5,789	2,711	830	890	1,160
2006	963,300	5,789	2,711	830	890	1,160
2002-2006	86,800 People added	29,490 Units added	13,810 Units added	4,220 Acres	**4,540 Acres**	5,900 Acres

* Units Per Acre Gross Residential Density

Source: Civic Census, 2001
Corporate Strategy & Economics/Planning & Transportation Policy, 2001
Multi-Family includes Apartment and Townhouse Units

Single Family/Duplex Housing 1989 - 2001 **Table 3**
Household Growth and Vacancy Rates

Year	Population Growth	Growth In Occupied Units	Vacant Units	S. F./Duplex Vacancy Rate
89 - 90	21,747	4,788	2,279	1.44%
90 - 91	15,708	4,739	2,411	1.48%
91 - 92	8,540	3,223	2,793	1.68%
92 - 93	10,586	4,603	3,104	1.81%
93 - 94	10,465	4,243	3,104	1.77%
94 - 95	10,889	4,315	3,360	1.86%
95 - 96	17,986	4,358	2,900	1.57%
96 - 97	23,439	5,030	2,621	1.39%
97 - 98	28,629	6,799	2,583	1.32%
98 - 99	23,054	*NA	2,734	1.30%
99 - 2000	18,361	5,746	2,858	1.31%
2000 - 2001	15,770	4,755	3,441	1.56%

Source: Civic Census, 2001
*Note: Census method changed in 1999 and Occupied Units have been modified from previous method of collection and was not used for that year.

Calgary Housing Starts 1997 - 2001 **Table 4**

Year	Single Family	Duplex/ Semi	Row	Apts.	Total	Total S.F./ Duplex	Total Multi-Family	% Multi-Family
1997	7,378	402	873	1,113	9,766	7,780	1,986	20%
1998	7,739	418	714	1,874	10,745	8,157	2,588	24%
1999	5,524	430	508	2,791	9,253	5,954	3,299	36%
2000	5,628	408	644	2,968	9,648	6,036	3,612	37%
2001	6,474	524	870	1,999	9,867	6,998	2,869	29%
Five Year Average	6,549 Units	436 Units	722 Units	2,149 Units	9,856 Units	**6,985 Units**	**2,871 Units**	29%

Source: C.M.H.C., 2001 December

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Multi-Family includes Apartment and Townhouse Units

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94 - 95	10,889	4,315	3,360	1.86%
95 - 96	17,986	4,358	2,900	1.57%
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97 - 98	28,629	6,799	2,583	1.32%
98 - 99	23,054	*NA	2,734	1.30%
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Five Year Average	6,549 Units	436 Units	722 Units	2,149 Units	9,856 Units	**6,985 Units**	**2,871 Units**	29%

Source: C.M.H.C., 2001 December

Market Share Distribution of New Suburban Single Family/Duplex Housing, And Multi-Family Housing By Sector City-Wide Totals 1997 - 2001 — Table 5

Sector	1997	1998	1999	2000	2001	Average Share 1997 - 2001
Single Family/Duplex						
North	22%	22%	17%	14%	13%	18%
Northeast	8%	10%	13%	16%	16%	13%
East	4%	4%	1%	0%	0%	2%
Southeast	19%	15%	11%	9%	10%	13%
South	15%	17%	18%	18%	16%	17%
West	6%	7%	10%	15%	17%	11%
Northwest	25%	27%	29%	28%	27%	27%
Suburban Total	100%	100%	100%	100%	100%	100%
Multi Family						
North	18%	5%	16%	8%	3%	10%
Northeast	2%	-1%	7%	6%	11%	5%
East	0%	-1%	13%	6%	0%	4%
Southeast	7%	5%	3%	15%	3%	7%
South	12%	17%	28%	26%	25%	22%
West	28%	40%	13%	18%	25%	25%
Northwest	32%	35%	19%	21%	33%	28%
Suburban Total	100%	100%	100%	100%	100%	100%

* Multi-family includes, apartments and row housing note these are city wide totals

Source: Policy & Transportation Planning, Building Permits New Units

Multi Family Building Permit Application Comparisons, By New Units Added

Multi Family Comparisons - By Suburban Sectors New Units Added	1997	1998	1999	2000	2001	Average Share 1997 - 2001
Suburban Sectors	1,871	2,557	2,163	2,857	2,009	64%
Central Sector	699	1,251	1,370	1,912	1,338	36%
City Total	2,570	3,808	3,533	4,769	3,347	100%

* Multi-family includes duplexes, apartments and row housing

Multi Family Comparisons - By Developing Communities New Units Added	1997	1998	1999	2000	2001	Average Share 1997-2001
Developing Communities	1,469	1,886	1,301	1,963	1,423	45%
Remainder of City	1,101	1,922	2,232	2,806	1,924	55%
City Total	2,570	3,808	3,533	4,769	3,347	100%

* Multi-family includes duplexes, apartments and row housing

Multi Family Comparisons - By Developing Communities New Units Added	1997	1998	1999	2000	2001	Average Share 1997 - 2001
Developing Communities	1,236	1,667	1,149	1,747	1,162	43%
Remainder of City	1,009	1,815	2,085	2,634	1,755	57%
City Total	2,245	3,482	3,234	4,381	2,917	100%

* Multi-family includes apartments and row housing

Source: Planning & Transportation Policy, City of Calgary, 2001
Information is based upon Building Permit Applications New Units Added

Units Associated with Residential Building Permit Applications in the Developing Communities, by Sector
January 1 to December 31, 2001

Table 6

Suburban Sectors *Developing Communities Only*	Single Family/Duplex Units: Single Family	Duplex	Total	% of Developing Communities	Multi-Family Units: Row	Apart.	Total	% of Developing Communities	All Units: Total	% of City
North	887	12	899	**13.8%**	11	36	47	**4.0%**	946	**9%**
%	94%	1%	95%		1%	4%	5%		100%	
Northeast	1,019	48	1067	**16.3%**	51	0	51	**4.4%**	1,118	**11%**
%	91%	4%	95%		5%	0%	5%		100%	
East	0	0	0	**0.0%**	0	0	0	**0.0%**	0	**0%**
%	0%	0%	0%		0%	0%	0%		0%	
Southeast	570	23	593	**9.1%**	39	13	52	**4.5%**	645	**6%**
%	88%	4%	92%		6%	2%	8%		100%	
South	1,032	42	1,074	**16.4%**	143	130	273	**23.5%**	1,347	**14%**
%	77%	3%	80%		11%	10%	20%		100%	
West	1,004	114	1,118	**17.1%**	12	178	190	**16.4%**	1,308	**13%**
%	77%	9%	85%		1%	14%	15%		100%	
Northwest	1,762	22	1,784	**27.3%**	220	329	549	**47.2%**	2,333	**23%**
%	76%	1%	76%		9%	14%	24%		100%	
Developing Communites Total	How much went to the Developing Communities? 6,274	261	6,535	**93%**	476	686	1,162	**40%**	7,697	**77%**
%	82%	3%	85%		6%	9%	15%		100%	
Remainder of City	How much went to the Remainder of the City 344	169	513	**7%**	143	1,612	1,755	**60%**	2,268	**23%**
%	15%	7%	23%		6%	71%	77%		100%	
City Total	6,618	430	7,048	**100%**	619	2,298	2,917	**100%**	9,965	**100%**
%	66%	4%	71%		6%	23%	29%		100%	

Notes: This Table reflects the number of UNITS applied for and NOT the number of applications. (each multi-family project may have a number of units but only one application).

The Table includes applications for NEW BUILDINGS only, and does not include applications to create units through additions or renovations to existing buildings.

Numbers may not add due to rounding.

Source: Planning & Transportation Policy, 2001

Market Share Distribution of New Suburban Single Family/Duplex Housing, And Multi-Family Housing By Sector City-Wide Totals 1997 - 2001 — Table 5

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East	4%	4%	1%	0%	0%	2%
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South	15%	17%	18%	18%	16%	17%
West	6%	7%	10%	15%	17%	11%
Northwest	25%	27%	29%	28%	27%	27%
Suburban Total	100%	100%	100%	100%	100%	100%
Multi Family						
North	18%	5%	16%	8%	3%	10%
Northeast	2%	-1%	7%	6%	11%	5%
East	0%	-1%	13%	6%	0%	4%
Southeast	7%	5%	3%	15%	3%	7%
South	12%	17%	28%	26%	25%	22%
West	28%	40%	13%	18%	25%	25%
Northwest	32%	35%	19%	21%	33%	28%
Suburban Total	100%	100%	100%	100%	100%	100%

* Multi-family includes, apartments and row housing note these are city wide totals

Source: Policy & Transportation Planning, Building Permits New Units

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City Total	2,245	3,482	3,234	4,381	2,917	100%

* Multi-family includes apartments and row housing

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Information is based upon Building Permit Applications New Units Added

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East	0	0	0	**0.0%**	0	0	0	**0.0%**	0	**0%**
%	0%	0%	0%		0%	0%	0%		0%	
Southeast	570	23	593	**9.1%**	39	13	52	**4.5%**	645	**6%**
%	88%	4%	92%		6%	2%	8%		100%	
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Numbers may not add due to rounding.

Source: Planning & Transportation Policy, 2001

Units Associated with Residential Building Permit Applications **Table 7**
All Communities in the Sector
January 1 to December 31, 2001

Suburban Sectors *All Communities*	Single Family/Duplex Units: Single Family	Duplex	Total	% of Suburbs	Multi-Family Units: Row	Apart.	Total	% of Suburbs	All Units: Total	% of City
North	888	12	900	**13.4%**	16	36	52	**3.1%**	952	**10%**
%	93%	1%	95%		2%	4%	5%		100%	
Northeast	1,023	48	1,071	**16.0%**	57	125	182	**10.7%**	1,253	**13%**
%	82%	4%	85%		5%	10%	15%		100%	
East	7	2	9	**0.1%**	0	0	0	**0.0%**	9	**0%**
%	78%	22%	100%		0%	0%	0%		100%	
Southeast	619	27	646	**9.6%**	39	13	52	**3.1%**	698	**7%**
%	89%	4%	93%		6%	2%	7%		100%	
South	1,055	42	1,097	**16.4%**	143	287	430	**25.3%**	1,527	**15%**
%	69%	3%	72%		9%	19%	28%		100%	
West	1,027	120	1,147	**17.1%**	12	409	421	**24.8%**	1,568	**16%**
%	65%	8%	73%		1%	26%	27%		100%	
Northwest	1,781	57	1,838	**27.4%**	220	344	564	**33.2%**	2,402	**24%**
%	74%	2%	77%		9%	14%	23%		100%	
	How much went to the Suburban Sectors									
Suburban Total	6,400	308	6,708	**95%**	487	1,214	1,701	**58%**	8,409	**84%**
%	76%	4%	80%		6%	14%	20%		100%	
	How much went to the Central Sector									
Central Sector	218	122	340	**5%**	132	1,084	1,216	**42%**	1,556	**16%**
%	14%	8%	22%		8%	70%	78%		100%	
City Total	6,618	430	7,048	**100%**	619	2,298	2,917	**100%**	9,965	**100%**
%	66%	4%	71%		6%	23%	29%		100%	

Notes: This Table reflects the number of UNITS applied for and NOT the number of applications, (each multi-family project may have a number of units but only one application).
The Table includes applications for NEW BUILDINGS only, and does not include applications to create units through additions or renovations to existing buildings.
Numbers may not add due to rounding.

Source: Planning & Transportation Policy, 2001

Location of Developer Proposals For Residential Subdivision Development in 2002 — **Table 8**

Sector	Hectares	Acres	%	Communities Affected
North	195	482	**20%**	Coventry Hills, Country Hills Village, Evanston, Hidden Valley,Panorama Hills, Symon's Valley
Northeast	107	265	**11%**	Applewood Park, Martindale, Saddle Ridge, Taradale
East	0	0	**0%**	None in 2002
Southeast	93	229	**9%**	Copperfield, Cranston, McKenzie Towne, New Brighton
South	155	383	**16%**	Bridlewood, Chaparral, Evergreen, Shawnessy, Somerset
West	202	498	**20%**	Altadore (CFB), Aspen Woods, Crestmont, Cougar Ridge, Discovery Ridge, Lincolin Park, Signal Hill, Springbank Hill, West Springs
Northwest	243	599	**24%**	Arbour Lake, Citadel, Edgemont, Rocky Ridge, Royal Oak, Tuscany, Valley Ridge
Total	994	2,455	**100%**	

Source: Land Use and Mobility, 2002
Developer Survey - Proposed Subdivision Development in 2002

Residential Subdivision Activity, (Tentative Plan Approvals Number of Lots) 1997 to 2001 (five years) — **Table 9**

Tentative Plan Approvals Number of Lots	1997	1998	1999	2000	2001	Total
Single Family	8,381	7,745	6,088	4,784	4,875	**31,873**
Two Family	98	222	214	508	451	**1,493**
Other Multi Family	120	75	114	199	41	**549**
Bareland Condominium	351	541	668	643	331	**2,534**
Total	**8,950**	**8,583**	**7,084**	**6,134**	**5,698**	**36,449**

Source: Planning & Transportation Policy, 2001

Units Associated with Residential Building Permit Applications **Table 7**
All Communities in the Sector
January 1 to December 31, 2001

Suburban Sectors *All Communities*	Single Family/Duplex Units: Single Family	Duplex	Total	% of Suburbs	Multi-Family Units: Row	Apart.	Total	% of Suburbs	All Units: Total	% of City
North	888	12	900	**13.4%**	16	36	52	**3.1%**	952	**10%**
%	93%	1%	95%		2%	4%	5%		100%	
Northeast	1,023	48	1,071	**16.0%**	57	125	182	**10.7%**	1,253	**13%**
%	82%	4%	85%		5%	10%	15%		100%	
East	7	2	9	**0.1%**	0	0	0	**0.0%**	9	**0%**
%	78%	22%	100%		0%	0%	0%		100%	
Southeast	619	27	646	**9.6%**	39	13	52	**3.1%**	698	**7%**
%	89%	4%	93%		6%	2%	7%		100%	
South	1,055	42	1,097	**16.4%**	143	287	430	**25.3%**	1,527	**15%**
%	69%	3%	72%		9%	19%	28%		100%	
West	1,027	120	1,147	**17.1%**	12	409	421	**24.8%**	1,568	**16%**
%	65%	8%	73%		1%	26%	27%		100%	
Northwest	1,781	57	1,838	**27.4%**	220	344	564	**33.2%**	2,402	**24%**
%	74%	2%	77%		9%	14%	23%		100%	
	How much went to the Suburban Sectors									
Suburban Total	6,400	308	6,708	**95%**	487	1,214	1,701	**58%**	8,409	**84%**
%	76%	4%	80%		6%	14%	20%		100%	
	How much went to the Central Sector									
Central Sector	218	122	340	**5%**	132	1,084	1,216	**42%**	1,556	**16%**
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Numbers may not add due to rounding.

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Northwest	243	599	**24%**	Arbour Lake, Citadel, Edgemont, Rocky Ridge, Royal Oak, Tuscany, Valley Ridge
Total	994	2,455	**100%**	

Source: Land Use and Mobility, 2002
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Total	**8,950**	**8,583**	**7,084**	**6,134**	**5,698**	**36,449**

Source: Planning & Transportation Policy, 2001

Estimated Supply of Approved Single Family/Duplex Lots in Suburban Areas By Sector, 2000 & 2001 — **Table 10**

Single Family/Duplex Lots

Sector	2000 (April) Lots Under Construction	2000 (April) Vacant Lots	2000 (April) % of Total Vacant Lots	2001 (April) Lots Under Construction	2001 (April) Vacant Lots	2001 (April) % of Total Vacant Lots
North	238	1,497	12%	192	1,523	12%
Northeast	234	1,218	10%	207	1,734	14%
East	0	0	0%	0	0	0%
Southeast	162	921	7%	193	1,110	9%
South	217	2,375	19%	251	1,935	15%
West	263	2,292	19%	303	3,022	24%
Northwest	660	4,049	33%	536	3,330	26%
Total	1,774	12,352	100%	1,682	12,654	100%

Estimates include registered lots and lots in approved Tentative Plans.

Source: Planning & Transportation Policy, 2001

Distribution of Vacant Serviced Lots, By Sector 2001 & 2002 — **Table 11**

Sector	2001 Vacant Lots	2001 %	2002 Vacant Lots	2002 %
North	767	10%	907	11%
Northeast	877	11%	1,049	13%
East	0	0%	0	0%
Southeast	751	10%	967	12%
South	1,173	15%	1,009	12%
West	1,866	24%	2,131	26%
Northwest	2,301	30%	2,083	26%
Total Suburbs	7,735	100%	8,146	100%

Source: Urban Development Institute (U.D.I.) Survey,
2001 February & 2002 January

Estimated Supply of Unsubdivided Residential Land By Sector, As of April, 2001 (In Gross Acres) **Table 12**

Sector	Fully Serviced	Partially Serviced	Unserviced	Total Supply
North	695	2,992	90	3,777
Northeast	1,035	0	0	1,035
East	0	0	0	0
Southeast	2,160	63	1,371	3,594
South	628	563	0	1,191
West	869	1,127	879	2,875
Northwest	1,268	0	0	1,268
Total	**6,655 Acres**	**4,745 Acres**	**2,340 Acres**	**13,740 Acres**

Notes:

"Fully Serviced": represents lands that have utility capacity in place (both water and sewer in place)

"Partially Serviced": represents lands that have some utility capacity in place (water or sewer but not both)

"Unserviced": represents lands that have no utility capacity in place (no water or sewer in place)

This inventory includes sites identified for multi-family uses in existing Outline Plans (313 acres). The inventory excludes areas of land annexed in 1989 for which land use policy and/or servicing information is not yet available.

Source: Planning & Transportation Policy, 2001

Estimated Supply of Approved Single Family/Duplex Lots in Suburban Areas By Sector, 2000 & 2001 — **Table 10**

Single Family/Duplex Lots

Sector	2000 (April) Lots Under Construction	2000 (April) Vacant Lots	2000 (April) % of Total Vacant Lots	2001 (April) Lots Under Construction	2001 (April) Vacant Lots	2001 (April) % of Total Vacant Lots
North	238	1,497	12%	192	1,523	12%
Northeast	**234**	**1,218**	**10%**	**207**	**1,734**	**14%**
East	0	0	0%	0	0	0%
Southeast	**162**	**921**	**7%**	**193**	**1,110**	**9%**
South	217	2,375	19%	251	1,935	15%
West	**263**	**2,292**	**19%**	**303**	**3,022**	**24%**
Northwest	660	4,049	33%	536	3,330	26%
Total	1,774	12,352	100%	1,682	12,654	100%

Estimates include registered lots and lots in approved Tentative Plans.
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Northwest	1,268	0	0	1,268
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This inventory includes sites identified for multi-family uses in existing Outline Plans (313 acres). The inventory excludes areas of land annexed in 1989 for which land use policy and/or servicing information is not yet available.

Source: Planning & Transportation Policy, 2001

Short-Term Estimates of Single Family/Duplex Housing Demand and Distribution By Sector,
For The Developing Communities and the City of Calgary 2002 - 2006

Table 13

(3)

Sector	Historical Share 1997-2001 5 year %	Historical Share 1999-2001 3 year %	Historical Share 2000-2001 2 year %	2002 %	2002 Units	2003 %	2003 Units	2004 %	2004 Units	2005 %	2005 Units	2006 %	2006 Units	2002 - 2006 Average Share (%)	2002 - 2006 Total Units	2002 - 2006 Total Acres
North	19%	15%	14%	14%	840	15%	810	17%	890	19%	1,020	20%	1,080	**17%**	**4,640**	**710**
Northeast	**12%**	**15%**	**16%**	**16%**	**960**	**15%**	**810**	**14%**	**740**	**13%**	**700**	**13%**	**700**	**14%**	**3,910**	**600**
East	2%	0%	0%	0%	0	0%	0	0%	0	0%	0	0%	0	**0%**	**0**	**0**
Southeast	**11%**	**10%**	**9%**	**10%**	**600**	**11%**	**590**	**12%**	**630**	**12%**	**650**	**12%**	**650**	**11%**	**3,120**	**480**
South	17%	17%	17%	17%	1,020	17%	920	16%	840	15%	810	15%	810	**16%**	**4,400**	**680**
West	**11%**	**14%**	**16%**	**16%**	**960**	**15%**	**810**	**15%**	**790**	**15%**	**810**	**15%**	**810**	**15%**	**4,180**	**640**
Northwest	28%	28%	28%	27%	1,620	27%	1,450	26%	1,370	26%	1,400	25%	1,350	**26%**	**7,190**	**1,110**
Developing Total	100%	100%	100%	100%	**6,017**	100%	**5,384**	100%	**5,257**	100%	**5,384**	100%	**5,384**	100%	**27,425**	**4,220**
					@93%		@93%		@93%		@93%		@93%		@93%	

Single Family/Duplex to the Developing Communities Forecast

(2)

	Historical Share 1997-2001 5 year	Historical Share 1999-2001 3 year	Historical Share 2000-2001 2 year	2002 Units	2003 Units	2004 Units	2005 Units	2006 Units	2002 - 2006 Total Units	2002 - 2006 Total Acres
City Total	**68%**	65%	64%	**6,470**	**5,789**	**5,653**	**5,789**	**5,789**	**29,489**	**4,537**
				@ 68%	@ 68%	@ 68%	@ 68%	@ 68%	@ 68%	

Total Single Family/Duplex Forecast

(1)

	2002 Units	2003 Units	2004 Units	2005 Units	2006 Units	2002 - 2006 Total Units
City Total	**9,500**	**8,500**	**8,300**	**8,500**	**8,500**	**43,300**

Total Units Forecasted (Single Family/Duplex/Townhouse & Apartment)

Notes: Total acres based on 6.5 units per acres.

(1) Total City Forecast for all unit types Single Family and Multi Family

(2) Historical share of growth in Single Family/Duplex that occurred in the City over the last 5 year period was **68%** and is used to forecast the next 5 years share of Single Family/Duplex Housing to the City.

(3) Historical share of growth in Single Family/Duplex that occurred in the developing communities over the last 5 year period was **93%** and is used to forecast the next 5 years share to the developing communities.

Totals may not add due to rounding

SOURCE: Planning and Transportation Policy, 2002 / Calgary and Region Socio-Economic Outlook 2001-2006 Report (updated)

Short-Term Estimates of Residential Land Supply and Demand Conditions For Single Family/Duplex Uses (By Developing Communities), 2002 - 2006 **Table 14**

Sector	2002	2003	2004	2005	2006	Total Demand 2002-2006	Supply With Utility Capacity (*)	Surplus or Shortfall By 2006(*)
North	140	135	148	170	180	710	630	-80
Northeast	160	135	123	117	117	600	1,011	411
East	0	0	0	0	0	0	0	NA
Southeast	100	98	105	108	106	480	2,107	1,627
South	170	153	140	135	135	680	613	-67
West	160	135	132	135	135	640	815	175
Northwest	270	242	228	233	225	1,110	1,166	56
Total	1,000 Acres	900 Acres	880 Acres	900 Acres	900 Acres	4,220 Acres	6,342 Acres	2,122 Acres

Notes: * Unsubdivided land only.

Excludes supply available in existing vacant subdivided lots (refer to Table 10).

12,654 Vacant Single Family/Duplex Units,

1,947 Acres

Also excludes land designated for multi-family uses (313 acres), which was included in Table 12.

Numbers may not total due to rounding.

SOURCE: Planning and Transportation Policy, 2001

Short-Term Estimates of Single Family/Duplex Housing Demand and Distribution By Sector,
For The Developing Communities and the City of Calgary 2002 - 2006 — Table 13

Sector	Historical Share 1997-2001 5 year %	Historical Share 1999-2001 3 year %	Historical Share 2000-2001 2 year %	2002 %	2002 Units	2003 %	2003 Units	2004 %	2004 Units	2005 %	2005 Units	2006 %	2006 Units	2002 - 2006 Average Share (%)	2002 - 2006 Total Units	2002 - 2006 Total Acres
North	19%	15%	14%	14%	840	15%	810	17%	890	19%	1,020	20%	1,080	**17%**	**4,640**	**710**
Northeast	12%	15%	16%	16%	960	15%	810	14%	740	13%	700	13%	700	**14%**	**3,910**	**600**
East	2%	0%	0%	0%	0	0%	0	0%	0	0%	0	0%	0	**0%**	**0**	**0**
Southeast	11%	10%	9%	10%	600	11%	590	12%	630	12%	650	12%	650	**11%**	**3,120**	**480**
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Northwest	28%	28%	28%	27%	1,620	27%	1,450	26%	1,370	26%	1,400	25%	1,350	**26%**	**7,190**	**1,110**
Developing Total	100%	100%	100%	100%	**6,017** @93%	100%	**5,384** @93%	100%	**5,257** @93%	100%	**5,384** @93%	100%	**5,384** @93%	100%	**27,425** @93%	**4,220**

	Historical Share 1997-2001 5 year	Historical Share 1999-2001 3 year	Historical Share 2000-2001 2 year	2002 Units	2003 Units	2004 Units	2005 Units	2006 Units	2002 - 2006 Total Units	2002 - 2006 Total Acres
City Total	**68%**	65%	64%	**6,470** @ 68%	**5,789** @ 68%	**5,653** @ 68%	**5,789** @ 68%	**5,789** @ 68%	**29,489** @ 68%	**4,537**

	2002 Units	2003 Units	2004 Units	2005 Units	2006 Units	2002 - 2006 Total Units
City Total	**9,500**	**8,500**	**8,300**	**8,500**	**8,500**	**43,300**

Notes: Total acres based on 6.5 units per acres

(1) Total City Forecast for all unit types Single Family and Multi Family

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East	0	0	0	0	0	0	0	NA
Southeast	100	98	105	108	108	480	2,107	1,627
South	170	153	140	135	135	680	613	-67
West	160	135	132	135	135	640	815	175
Northwest	270	242	228	233	225	1,110	1,166	56
Total	1,000 Acres	900 Acres	880 Acres	900 Acres	900 Acres	4,220 Acres	6,342 Acres	2,122 Acres

Notes: * Unsubdivided land only.

Excludes supply available in existing vacant subdivided lots (refer to Table 10).

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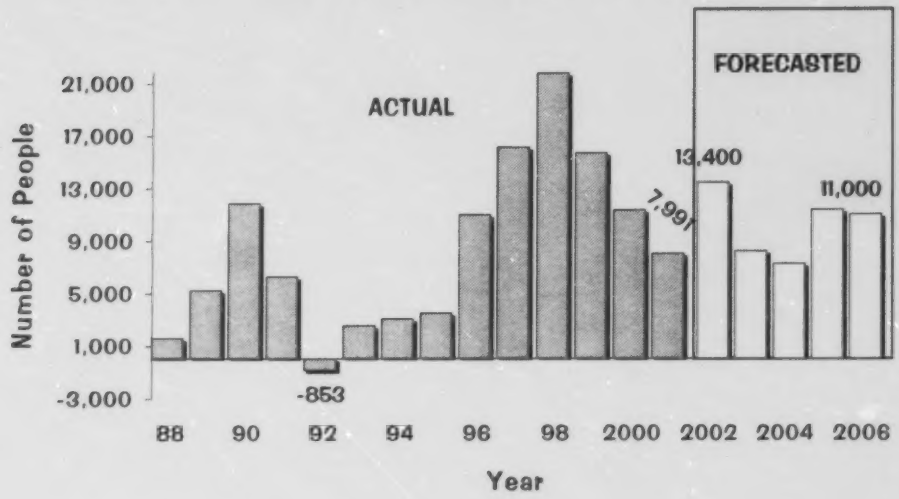
SOURCE: Planning and Transportation Policy, 2001

Figure 1

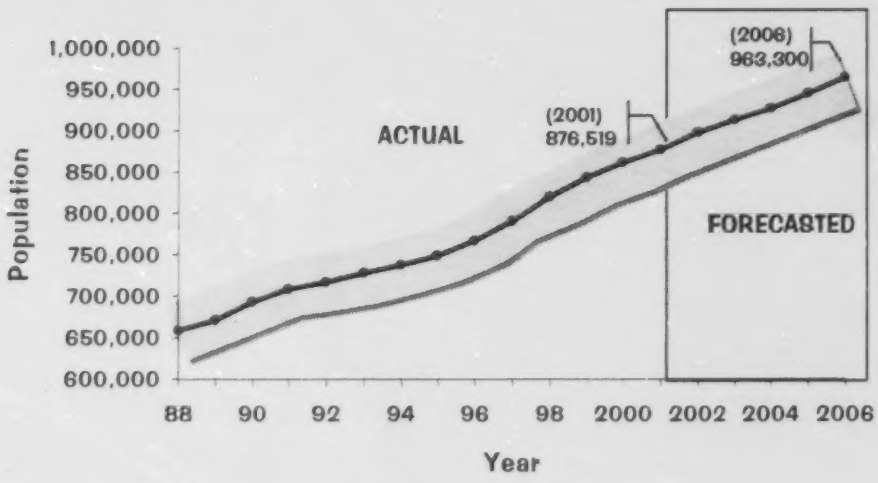
ANNUAL NET MIGRATION FOR CALGARY
ACTUAL (1988 - 2001) AND FORECASTED (2002 - 2006)



REFER TO TABLE 1

Figure 2

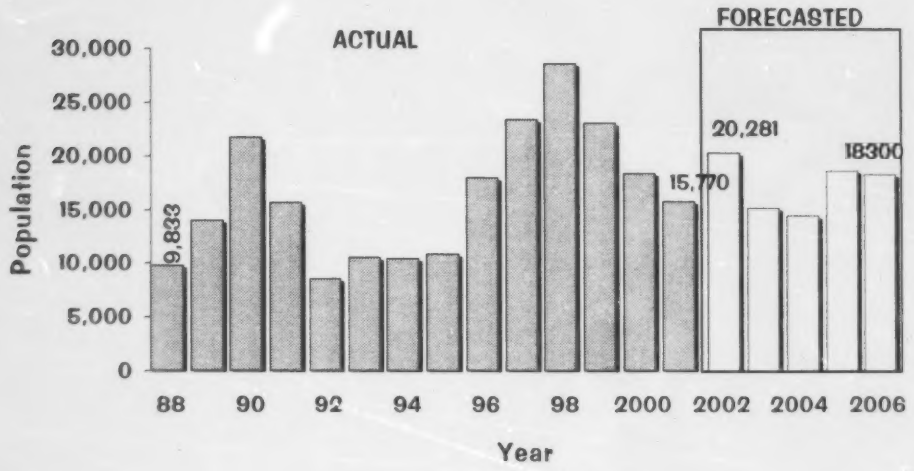
RECENT AND FORECASTED POPULATION GROWTH
FOR CALGARY, 1988 - 2006



REFER TO TABLE 1

Figure 3

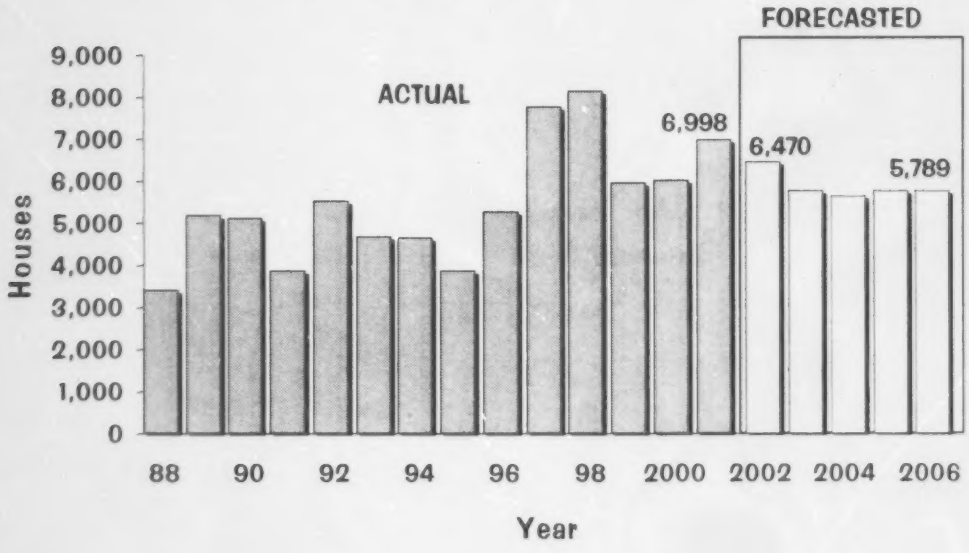
ANNUAL POPULATION GROWTH
ACTUAL (1988 - 2001) AND FORECASTED (2002 - 2006)



REFER TO TABLE 2 AND TABLE 3

Figure 4

SINGLE FAMILY/DUPLEX HOUSING STARTS,
ACTUAL (1988 - 2001) AND FORECASTED (2002 - 2006)



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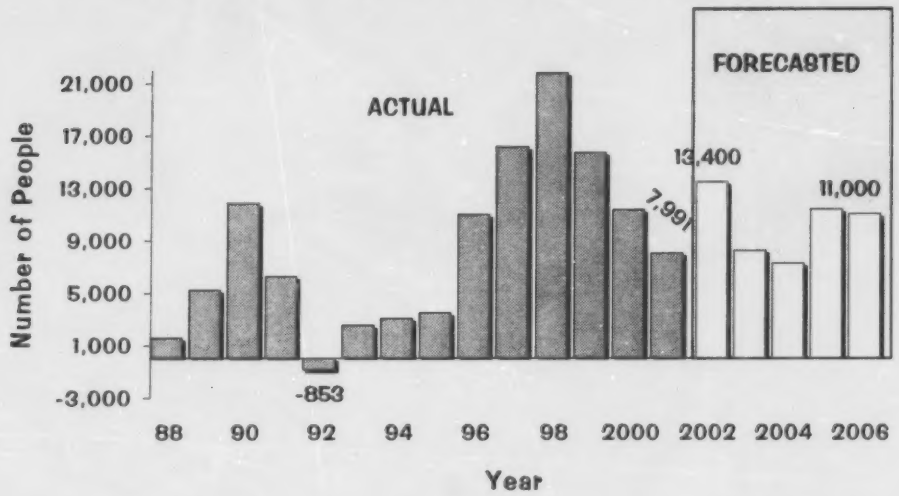

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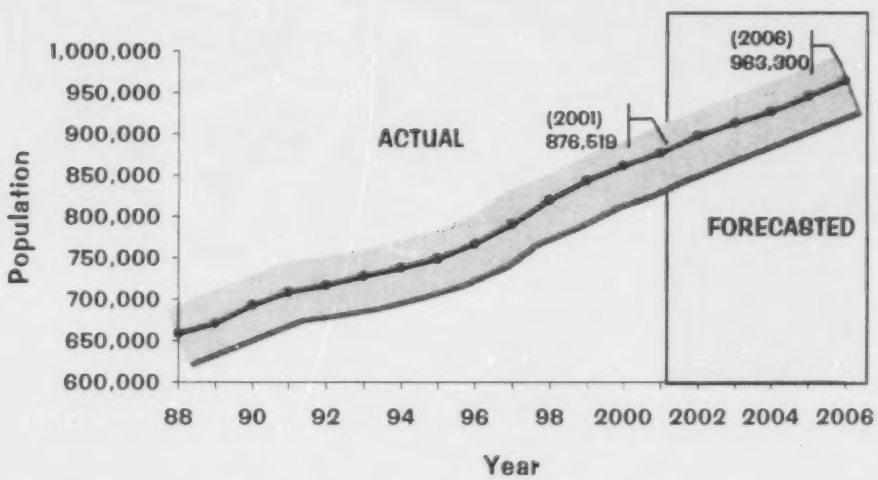
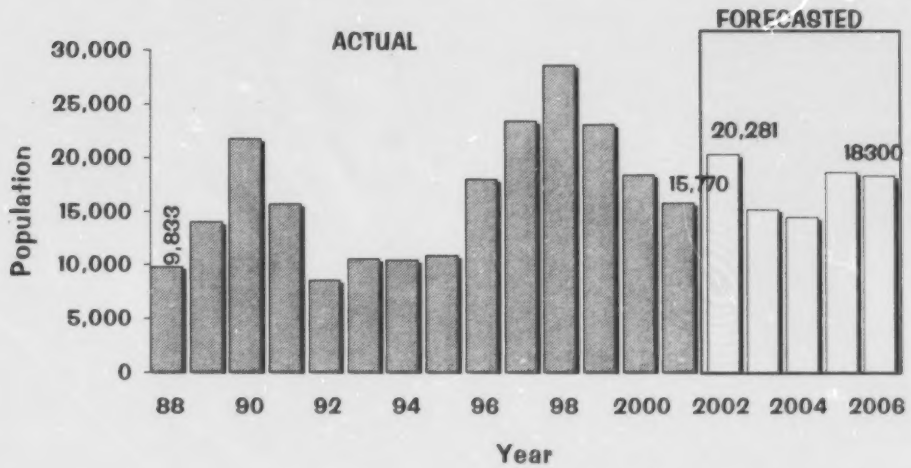


REFER TO TABLE 1

Figure 3

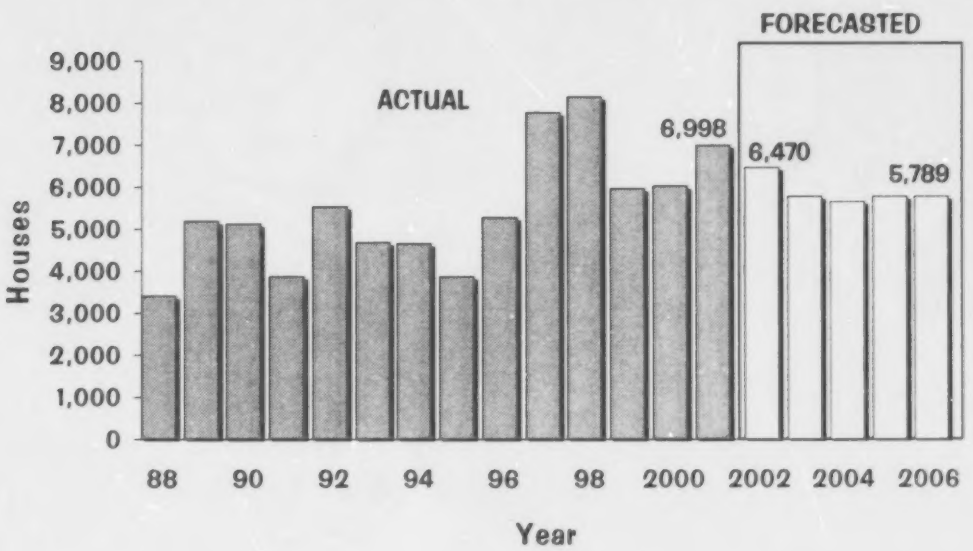
ANNUAL POPULATION GROWTH
ACTUAL (1988 - 2001) AND FORECASTED (2002 - 2006)



REFER TO TABLE 2 AND TABLE 3

Figure 4

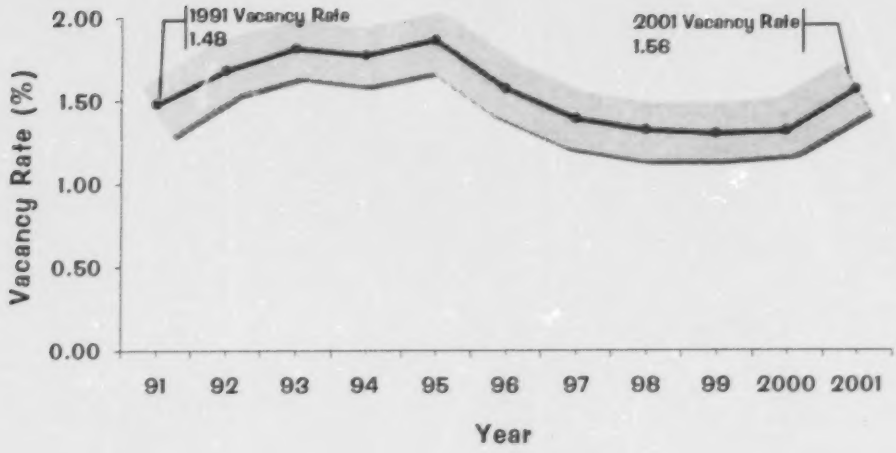
SINGLE FAMILY/DUPLEX HOUSING STARTS,
ACTUAL (1988 - 2001) AND FORECASTED (2002 - 2006)



REFER TO TABLE 2 AND TABLE 4

Figure 5

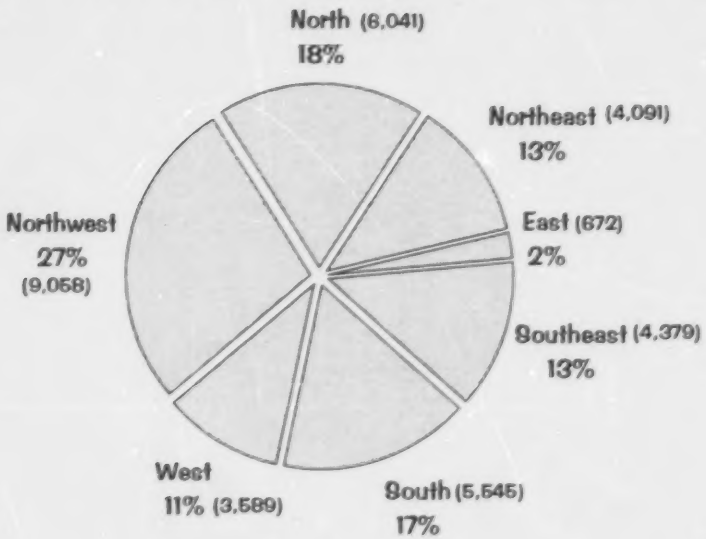
SINGLE FAMILY/DUPLEX VACANCY RATES 1991 - 2001 (APRIL)



REFER TO TABLE 3

Figure 6

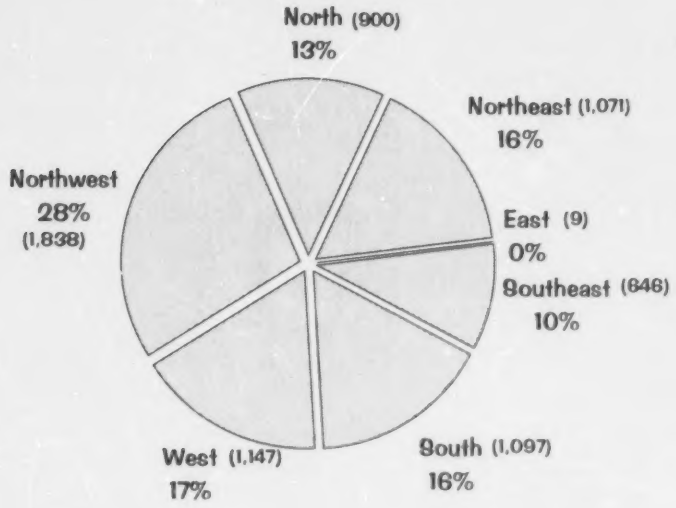
MARKET SHARE OF NEW SINGLE FAMILY/DUPLEX UNITS (Building Permit Applications) BY SECTOR, 1997 - 2001



REFER TO TABLE 5

Figure 7

MARKET SHARE OF NEW SINGLE FAMILY/DUPLEX UNITS (Building Permit Applications) BY SECTOR, 2001



REFER TO TABLE 5 & 7

Figure 8

MARKET SHARE OF NEW SINGLE FAMILY/DUPLEX UNITS (Building Permit Applications) BY SECTOR, 2000

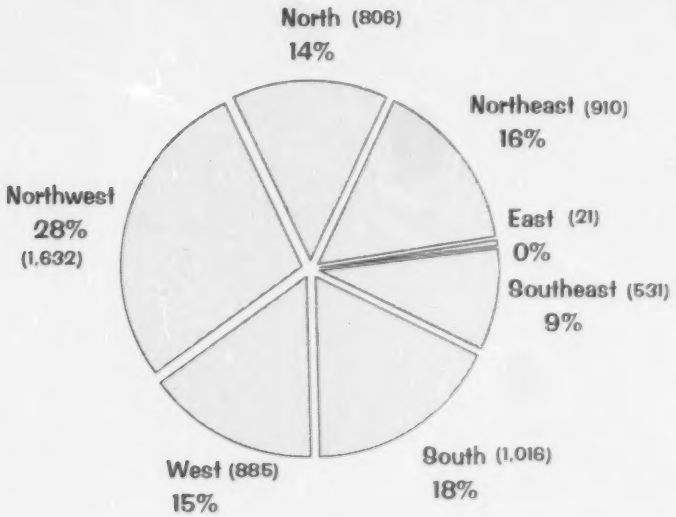
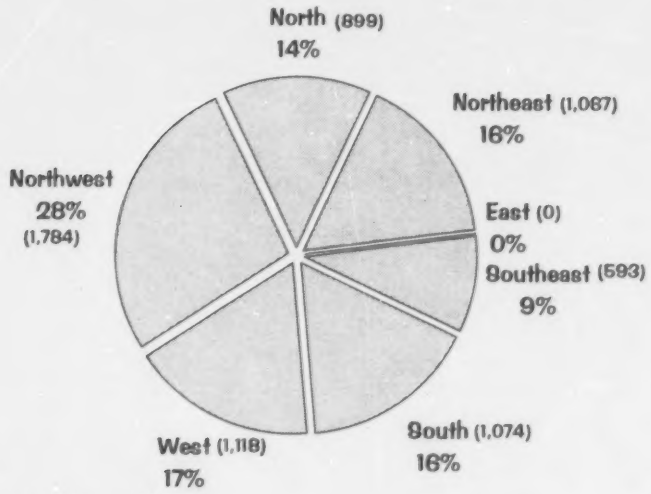


Figure 9

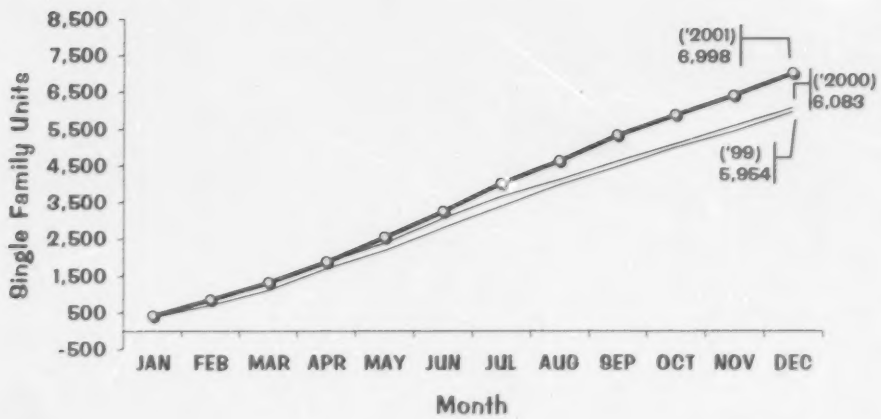
MARKET SHARE OF NEW SINGLE FAMILY/DUPLEX UNITS (Building Permit Applications) BY DEVELOPING COMMUNITIES, 2001



REFER TO TABLE 8 & MAP 7 (For the Developing Communities)

Figure 10

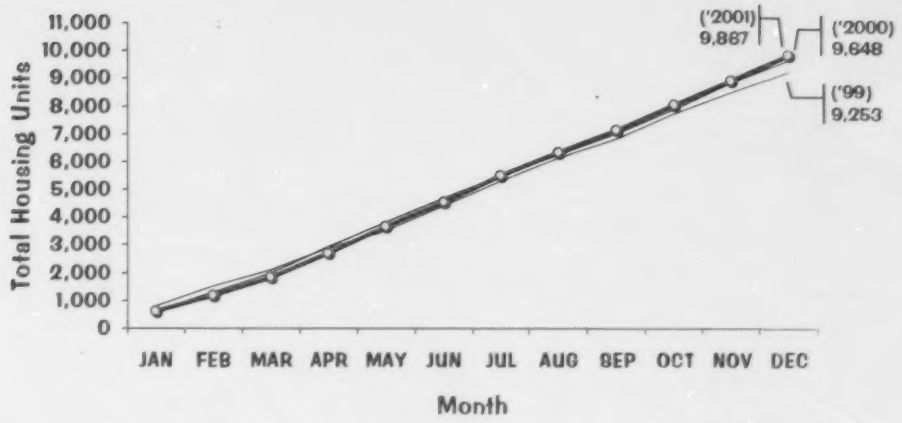
CUMULATIVE SINGLE FAMILY/DUPLEX HOUSING STARTS, BY MONTH, 1999, 2000, AND 2001



Source: Canada Mortgage and Housing Corporation

Figure 11

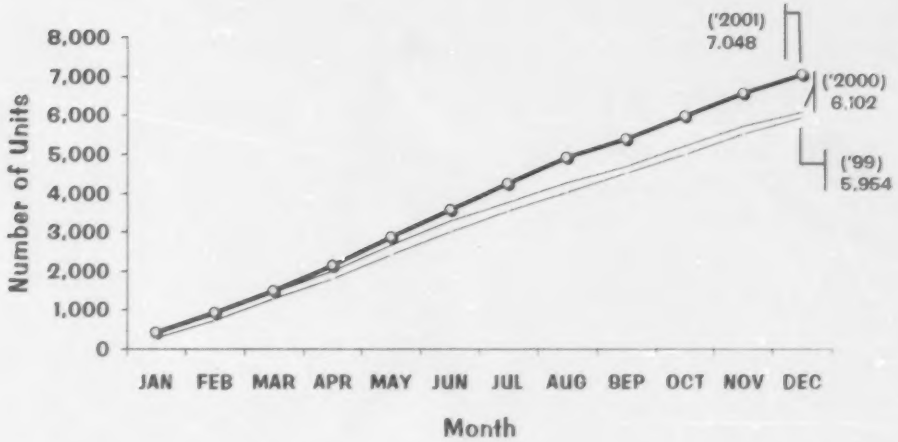
CUMULATIVE TOTAL HOUSING STARTS, BY MONTH, 1999, 2000 AND 2001



Source: Canada Mortgage and Housing Corporation

Figure 12

CUMULATIVE SINGLE FAMILY/DUPLEX BUILDING PERMIT APPLICATIONS, BY MONTH, 1999, 2000 AND 2001



REFER TO TABLE 7

Figure 13

OUTLINE PLAN APPLICATIONS (NUMBER OF ACRES) 1989 - 2001

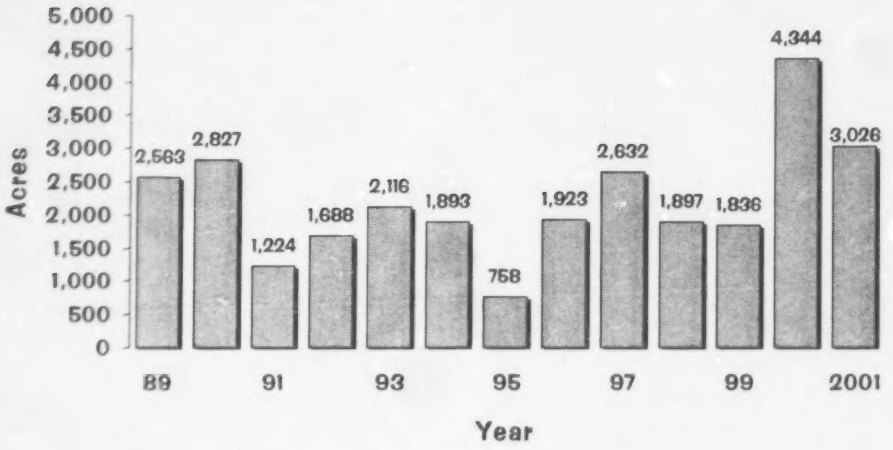


Figure 14

TENTATIVE PLAN APPLICATIONS (NUMBER OF LOTS) 1989 - 2001

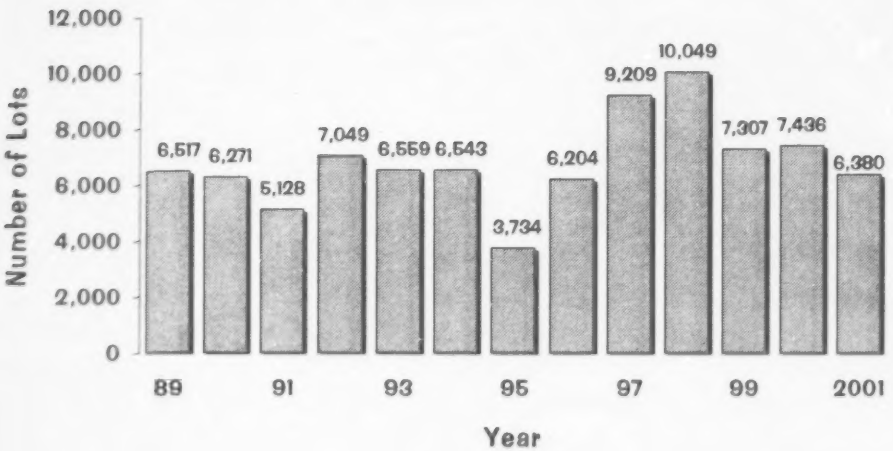
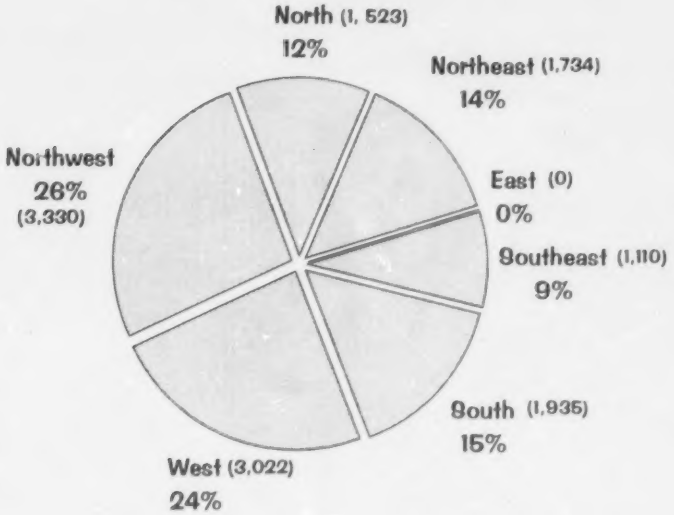


Figure 15

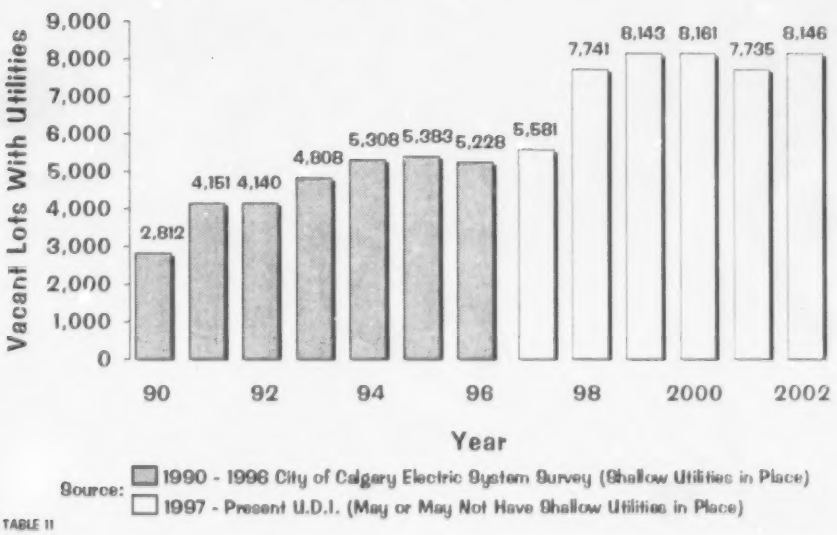
DISTRIBUTION OF VACANT SINGLE FAMILY/DUPLEX LOTS (Estimated) BY SECTOR, APRIL, 2001



REFER TO TABLE 10

Figure 16

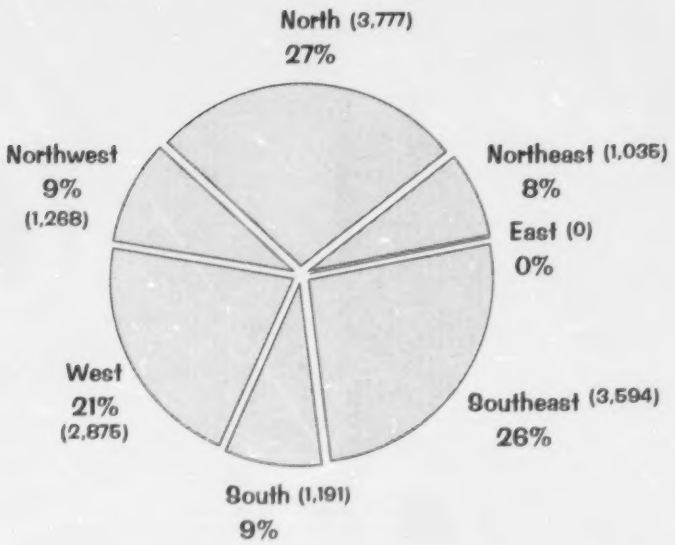
VACANT LOT SURVEYS - ENMAX & URBAN DEVELOPMENT INSTITUTE, 1990 - 2002



REFER TO TABLE 11

Figure 17

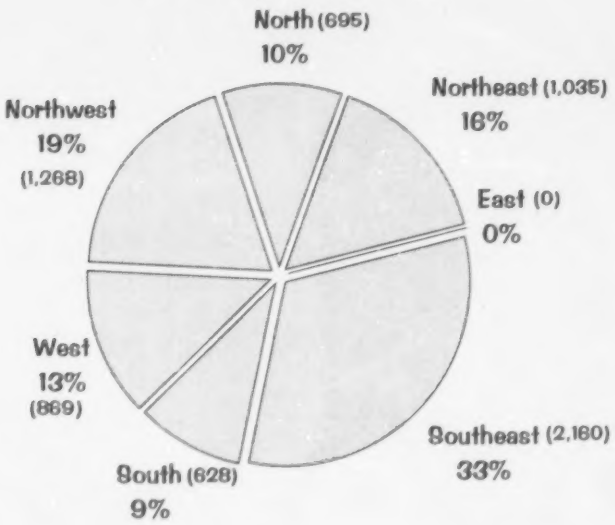
DISTRIBUTION OF THE UNSUBDIVIDED RESIDENTIAL LAND SUPPLY, BY SECTOR (APRIL 2001) (ACRES)



REFER TO TABLE 12

Figure 18

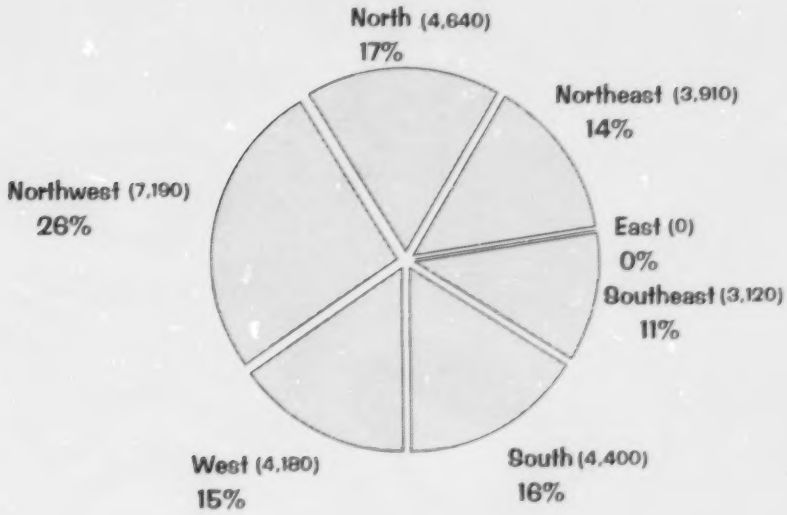
DISTRIBUTION OF THE UNSUBDIVIDED RESIDENTIAL LAND SUPPLY WITH UTILITY CAPACITY IN PLACE, BY SECTOR (APRIL 2001) (ACRES)



REFER TO TABLE 12

Figure 19

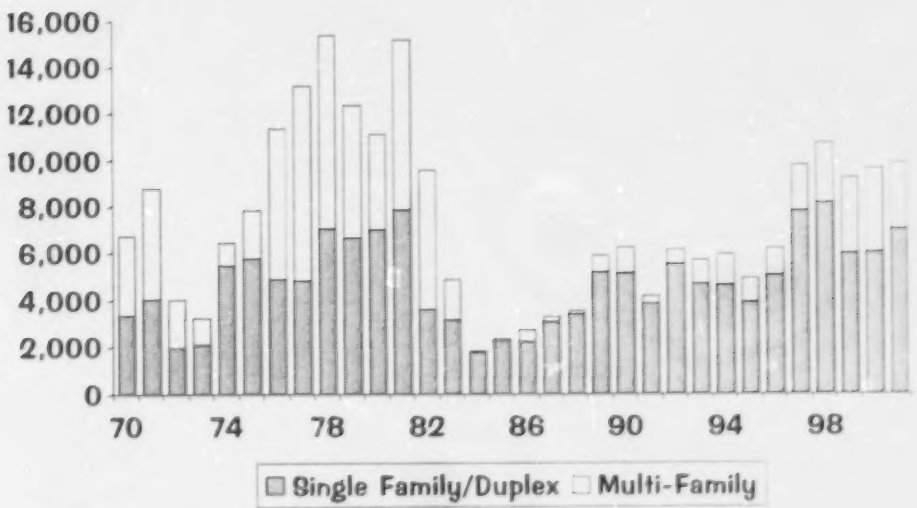
EXPECTED DISTRIBUTION OF NEW SINGLE FAMILY/DUPLEX UNITS, BY SECTOR (Developing Communities), (2002 - 2006)



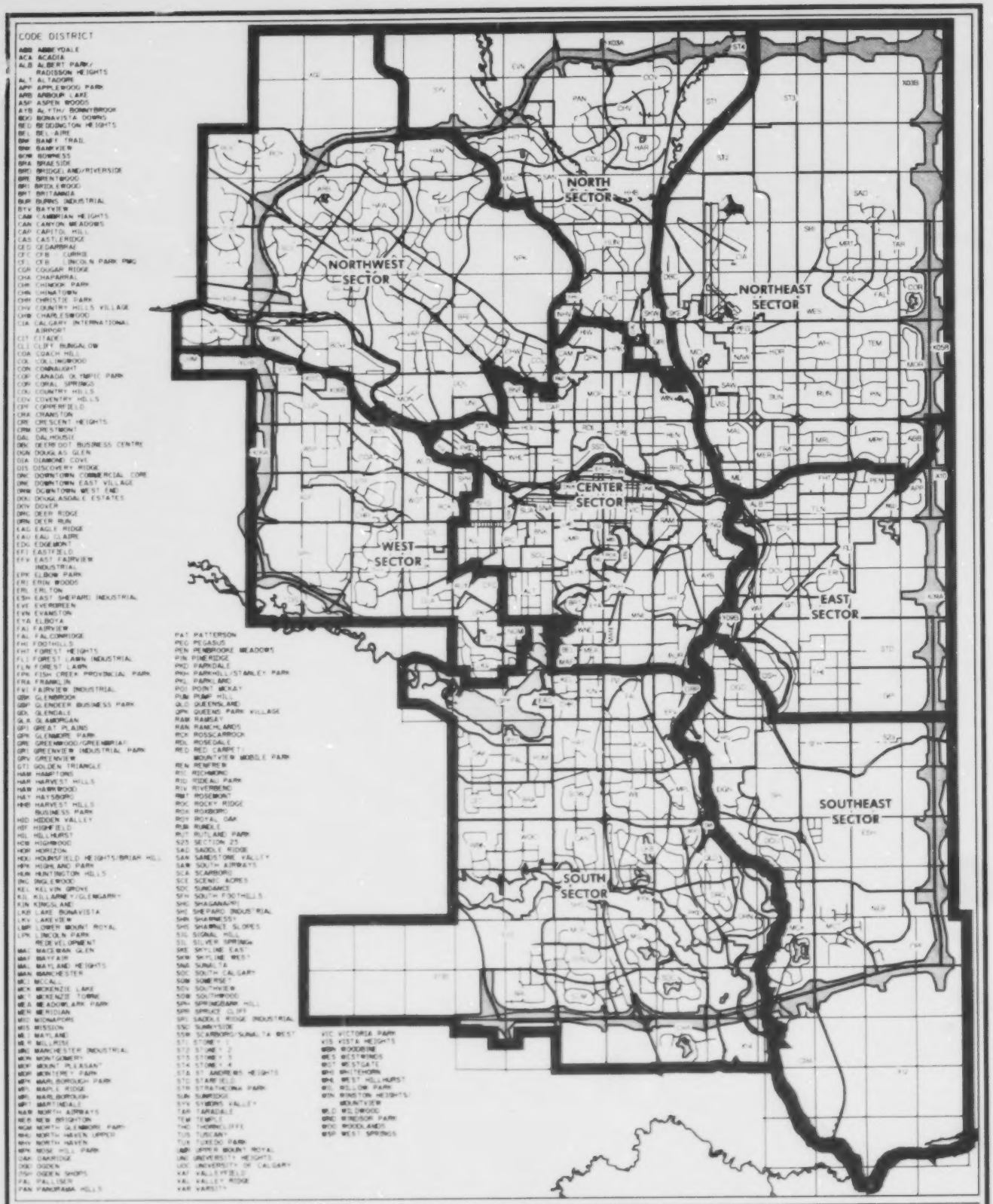
REFER TO TABLE 13

Figure 20

CALGARY HOUSING STARTS SINGLE FAMILY/DUPLEX VS MULTI-FAMILY, (1970 - 2001)



REFER TO TABLE 4



SUBURBAN SECTORS AND
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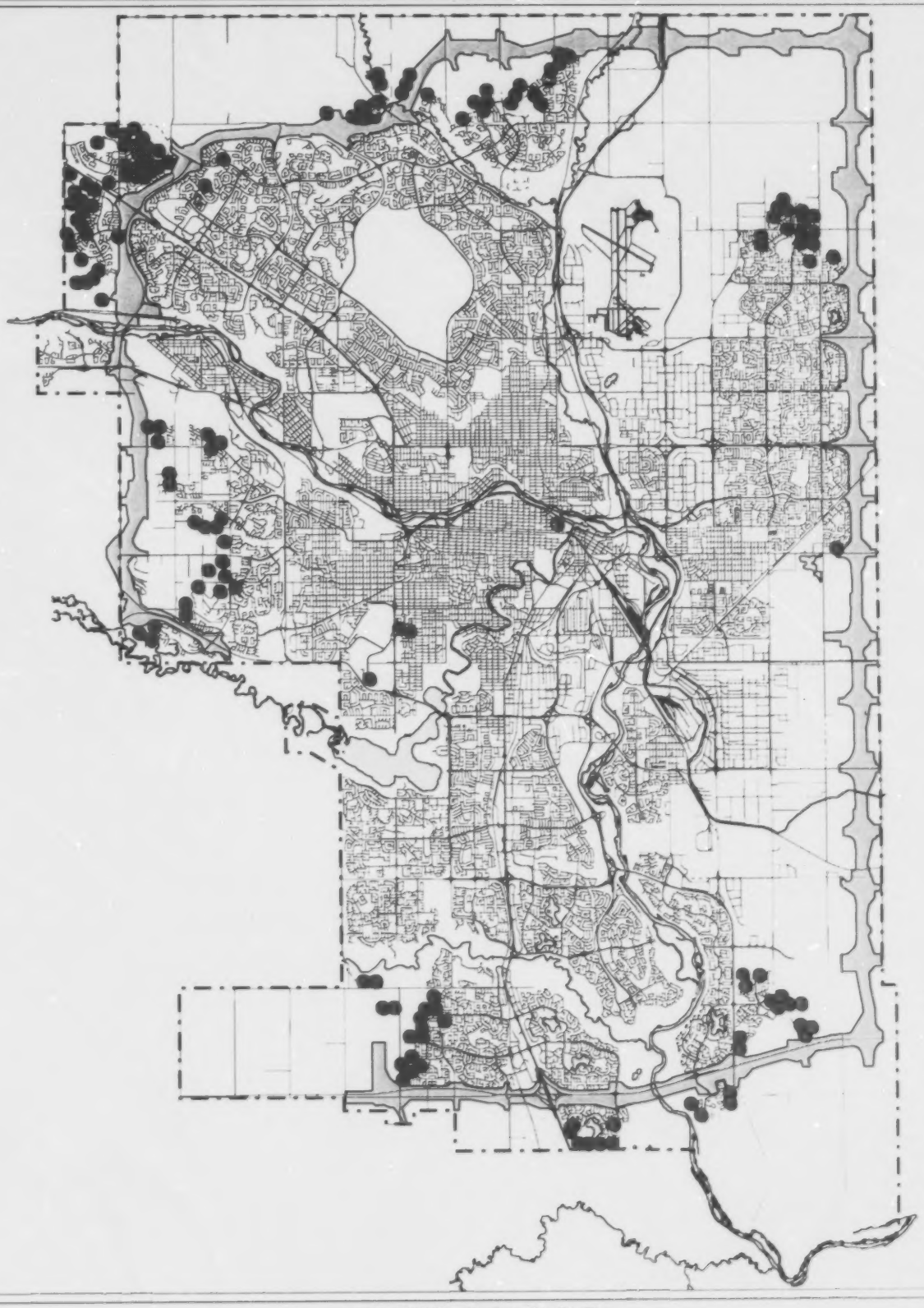
SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY-WIDE
MAP 1



2002 DEVELOPER SURVEY

AREAS IN WHICH DEVELOPERS HAVE INDICATED
ANTICIPATED DEVELOPMENT ACTIVITY

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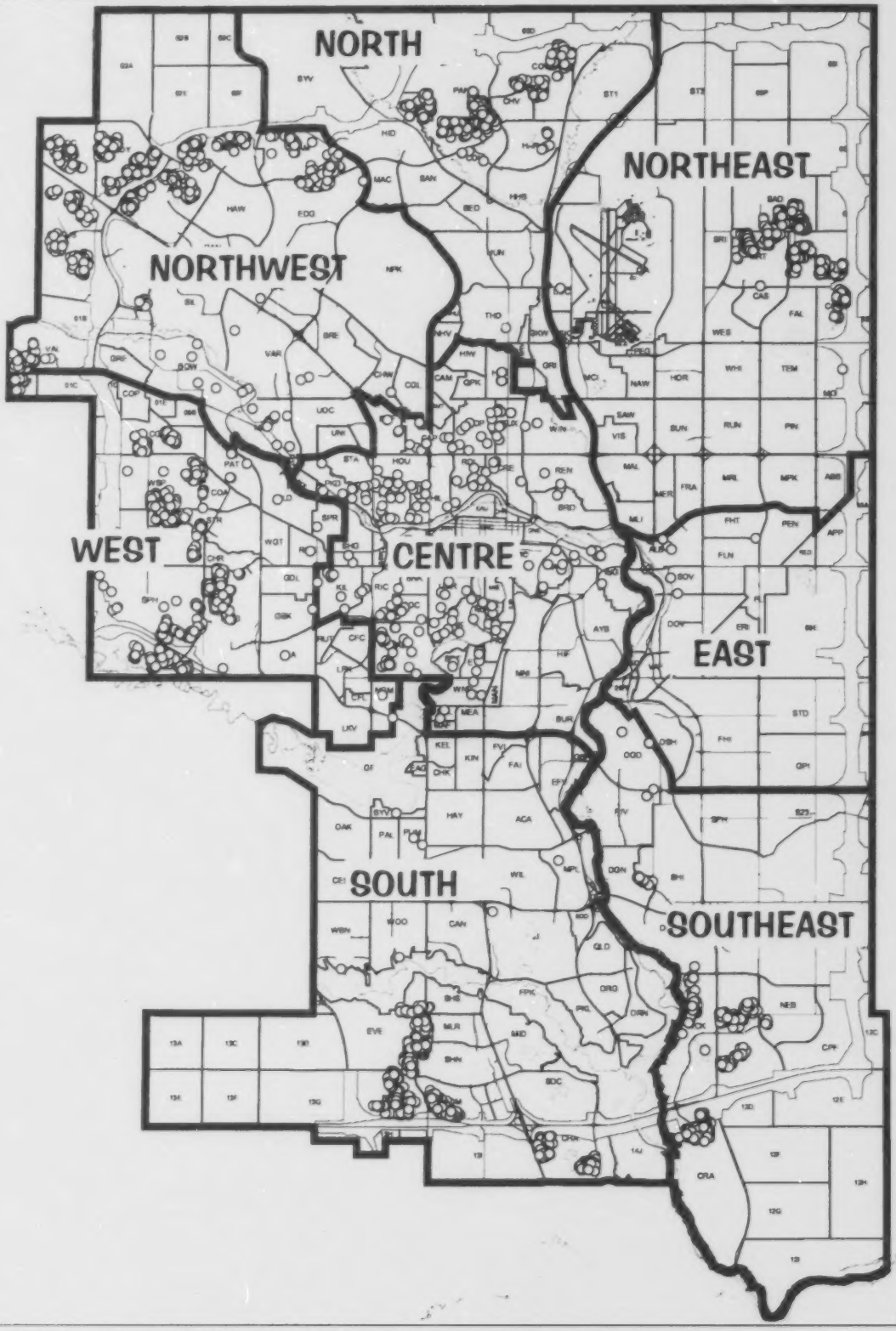
SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY-WIDE
MAP 2

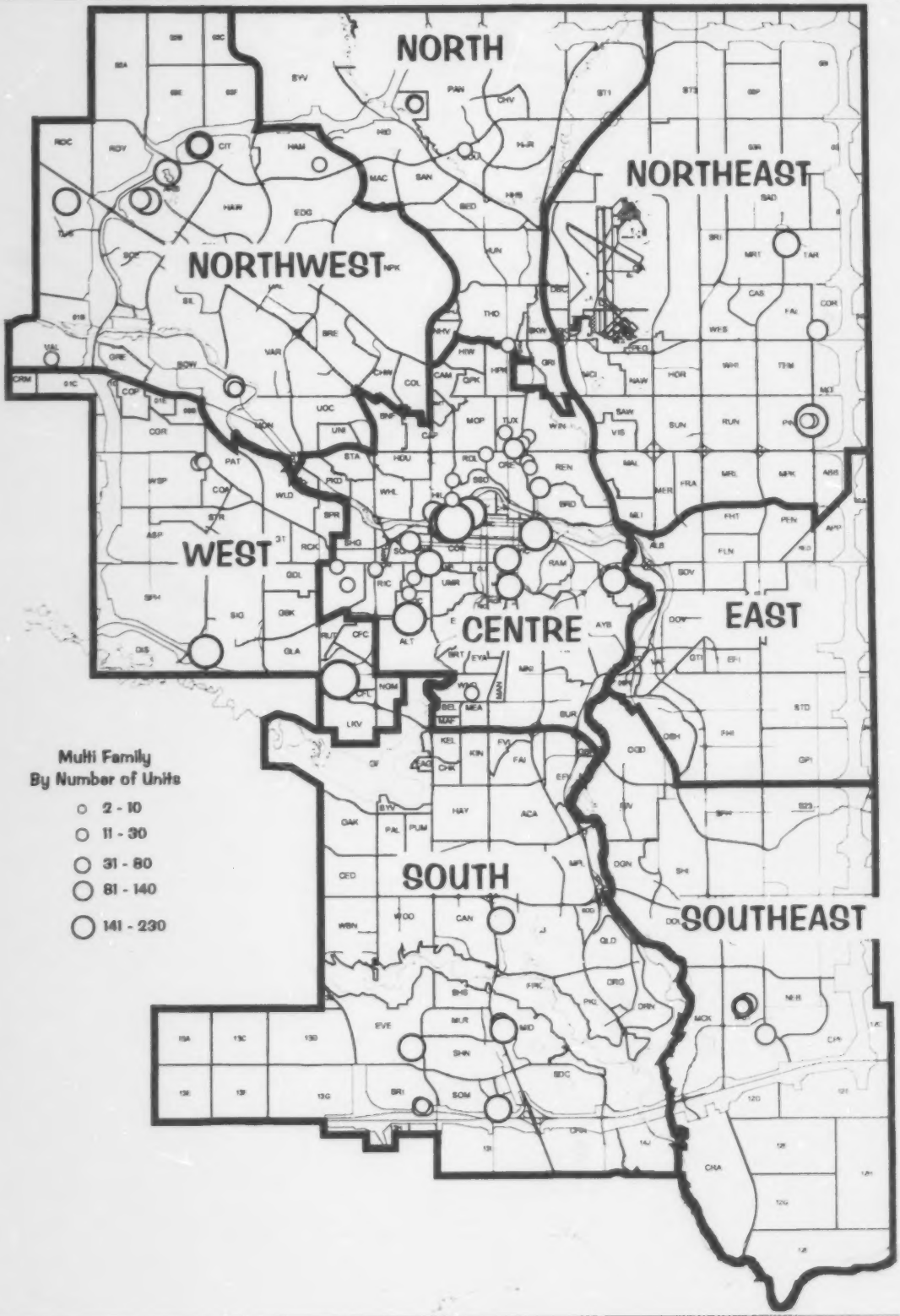


BUILDING PERMIT APPLICATIONS FOR NEW SINGLE FAMILY HOUSES - 2001

THE CITY OF CALGARY
LAND USE AND MOBILITY
PLANNING AND TRANSPORTATION POLICY

SHORT-TERM GROWTH MANAGEMENT STRATEGY

CITY-WIDE MAP 3

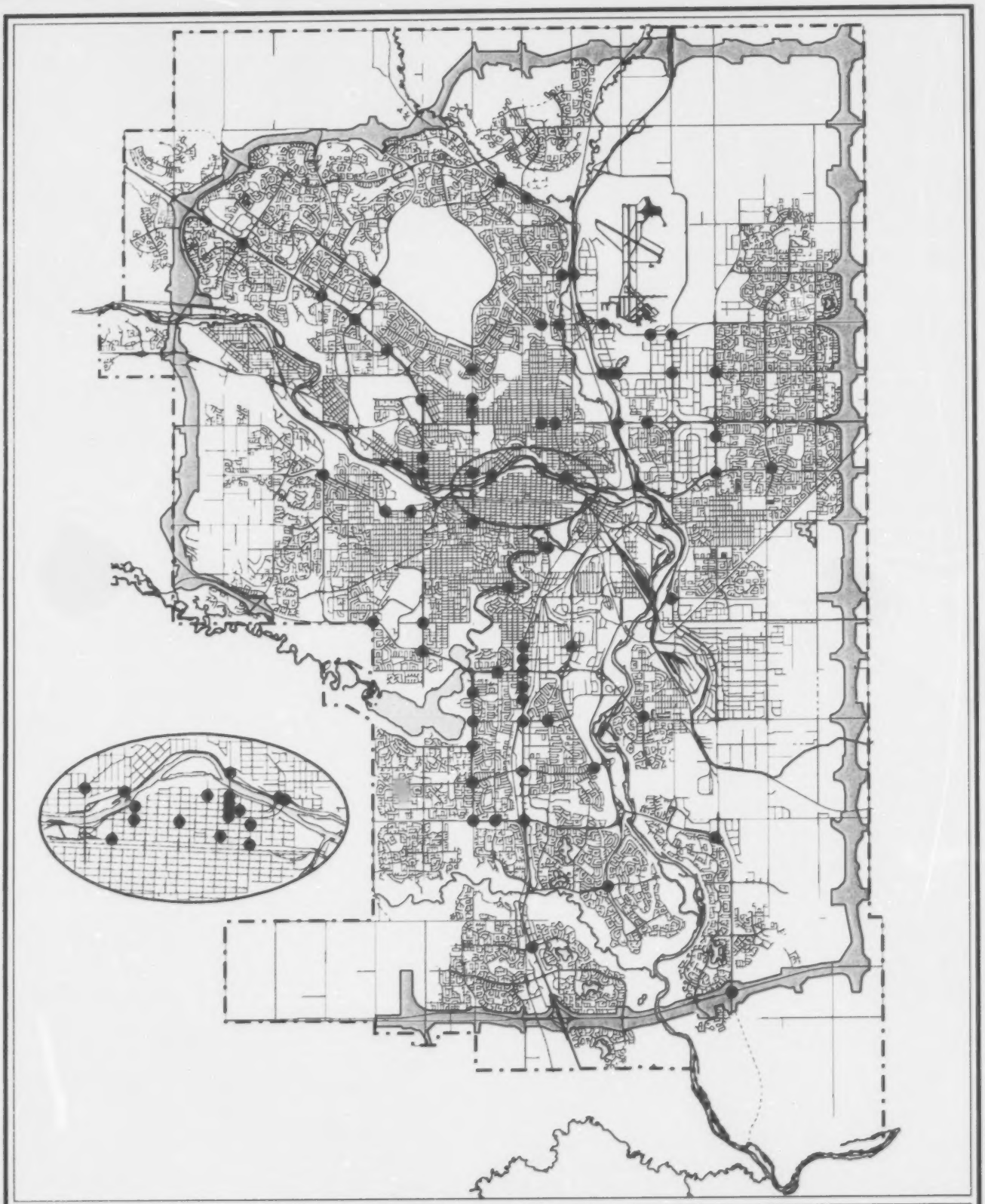


BUILDING PERMIT APPLICATIONS
FOR NEW MULTI FAMILY UNITS - 2001 (Townhouse and Apartment)

THE CITY OF CALGARY
LAND USE AND MOBILITY
PLANNING AND TRANSPORTATION POLICY

SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY-WIDE
MAP 4



CONGESTED SIGNALIZED INTERSECTIONS – 1996

CAPACITY CONSTRAINT LOCATIONS (A.M. AND/OR P.M. PEAK HOUR)
ACCORDING TO INDUSTRY STANDARD MEASURES

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SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY-WIDE
MAP 5

o:\plan\growth\report\cw7_rpt.dgn

Lands shown here as "Serviced, "Partially Serviced" and "Unserviced" refer to areas where approved and Community Plans in preparation exist.

UNSUBDIVIDED RESIDENTIAL LAND SUPPLY (as of April 2001)

- FULLY SERVICED (BOTH WATER AND SEWER IN PLACE)
- PARTIALLY SERVICED (WATER OR SEWER BUT NOT BOTH)
- UNSERVICED (NO WATER OR SEWER IN PLACE)
- SECTOR BOUNDARY
- AREA SUBJECT TO REVIEW
- TRANSPORTATION UTILITY CORRIDOR

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PLANNING AND TRANSPORTATION POLICY
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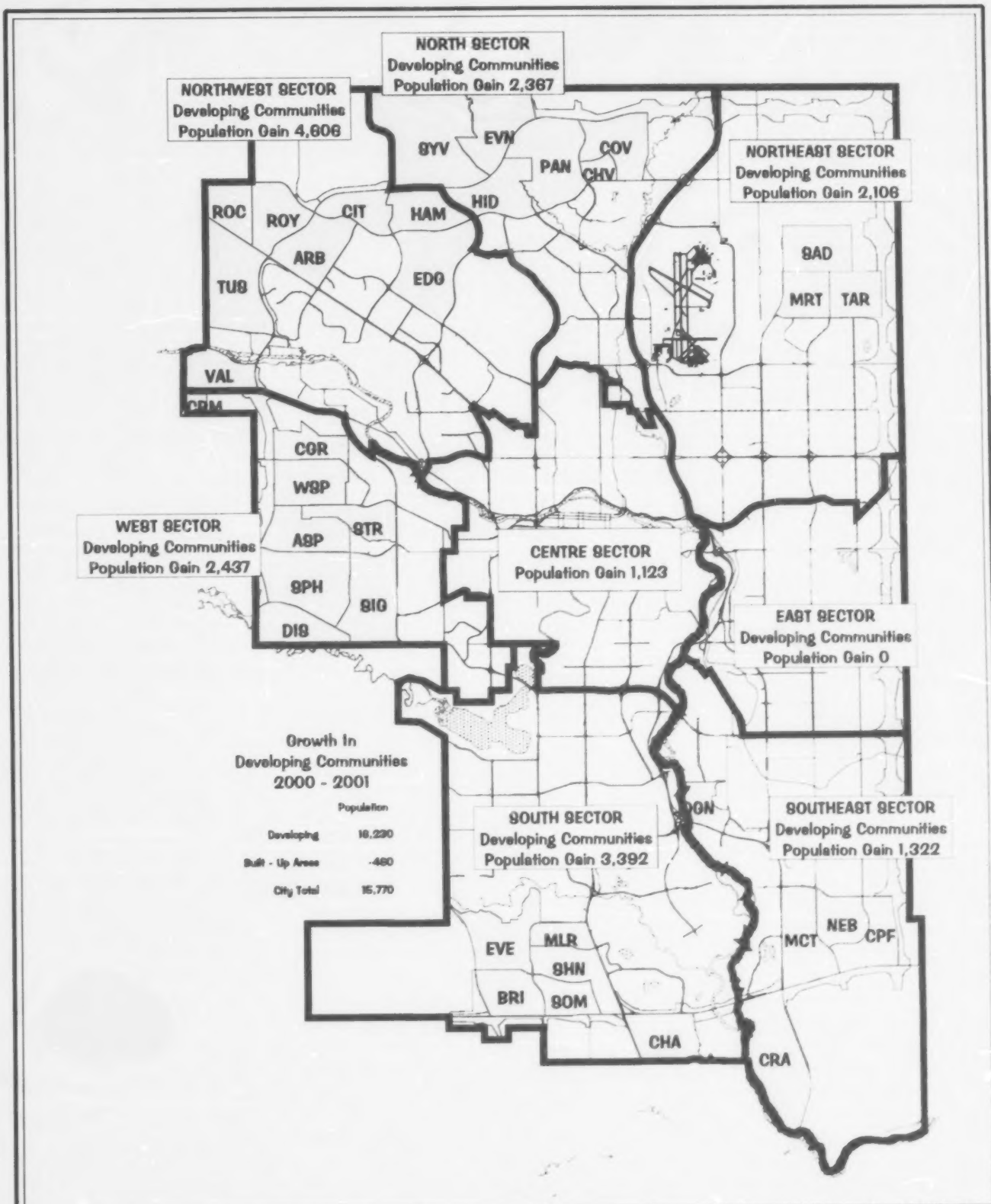
SHORT-TERM GROWTH MANAGEMENT STRATEGY

CITY WIDE
MAP 6

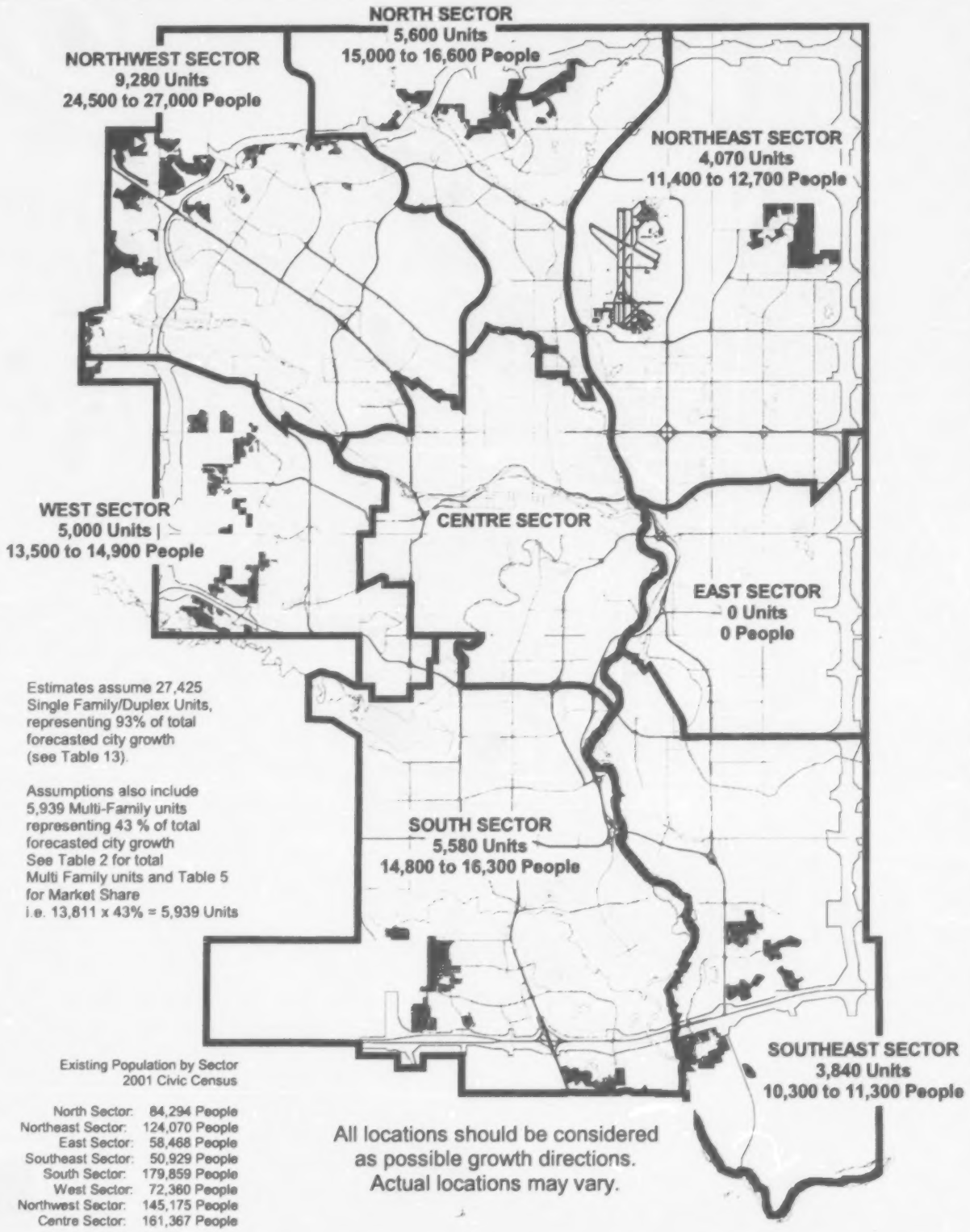


GROWTH IN DEVELOPING COMMUNITIES
2000 - 2001

THE CITY OF CALGARY
LAND USE AND MOBILITY
PLANNING AND TRANSPORTATION POLICY

SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY-WIDE
MAP 7


NORTH SECTOR
5,600 Units
15,000 to 16,600 People
NORTHWEST SECTOR
9,280 Units
24,500 to 27,000 People
NORTHEAST SECTOR
4,070 Units
11,400 to 12,700 People
WEST SECTOR
5,000 Units
13,500 to 14,900 People
CENTRE SECTOR
EAST SECTOR
0 Units
0 People
SOUTH SECTOR
5,580 Units
14,800 to 16,300 People
SOUTHEAST SECTOR
3,840 Units
10,300 to 11,300 People
Estimates assume 27,425 Single Family/Duplex Units, representing 93% of total forecasted city growth (see Table 13).
Assumptions also include 5,939 Multi-Family units representing 43 % of total forecasted city growth See Table 2 for total Multi Family units and Table 5 for Market Share i.e. 13,811 x 43% = 5,939 Units
Existing Population by Sector
2001 Civic Census
North Sector: 84,294 People
Northeast Sector: 124,070 People
East Sector: 58,468 People
Southeast Sector: 50,929 People
South Sector: 179,859 People
West Sector: 72,360 People
Northwest Sector: 145,175 People
Centre Sector: 161,367 People
All locations should be considered as possible growth directions. Actual locations may vary.

FORECASTED SUBURBAN GROWTH
2002 - 2006

THE CITY OF CALGARY
LAND USE AND MOBILITY PLANNING AND TRANSPORTATION POLICY

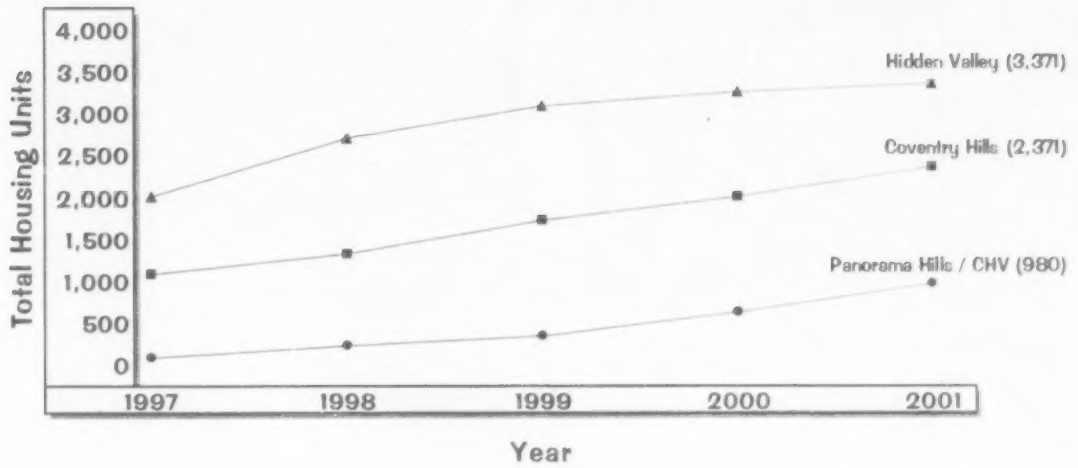
SHORT-TERM GROWTH MANAGEMENT STRATEGY

CITY-WIDE MAP 8

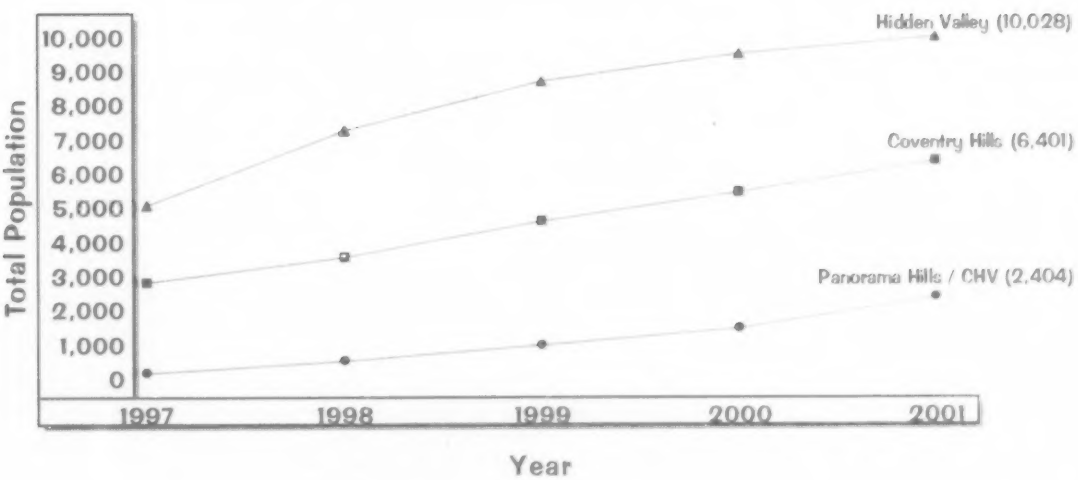
Appendix II

Sector Profiles

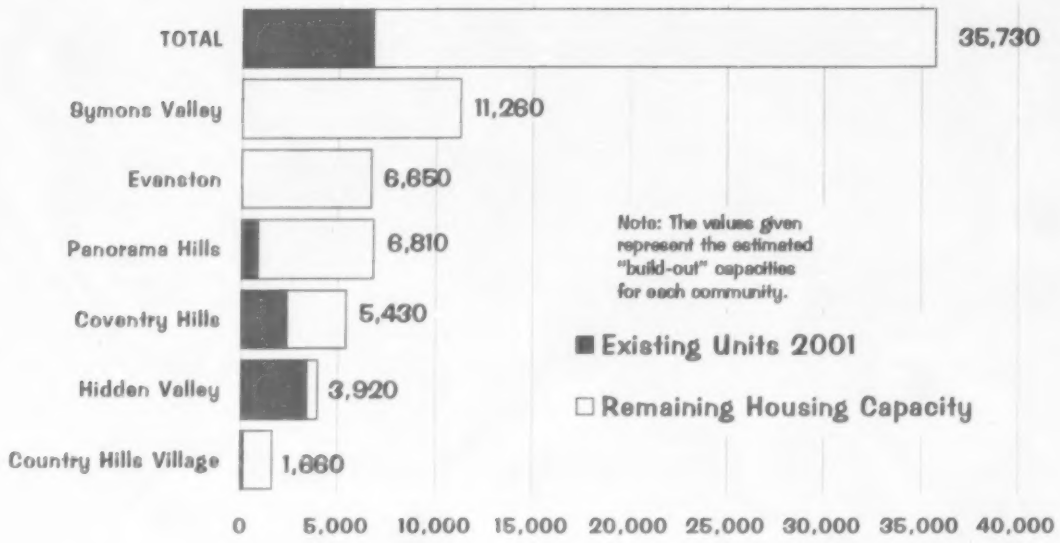
NORTH SECTOR
RECENT GROWTH IN HOUSING



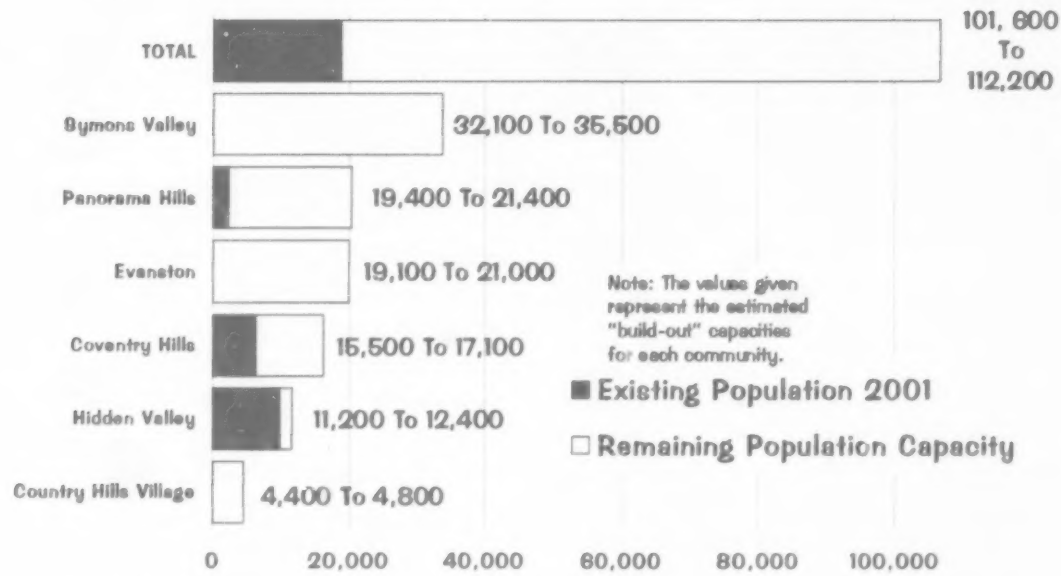
NORTH SECTOR
RECENT GROWTH IN POPULATION



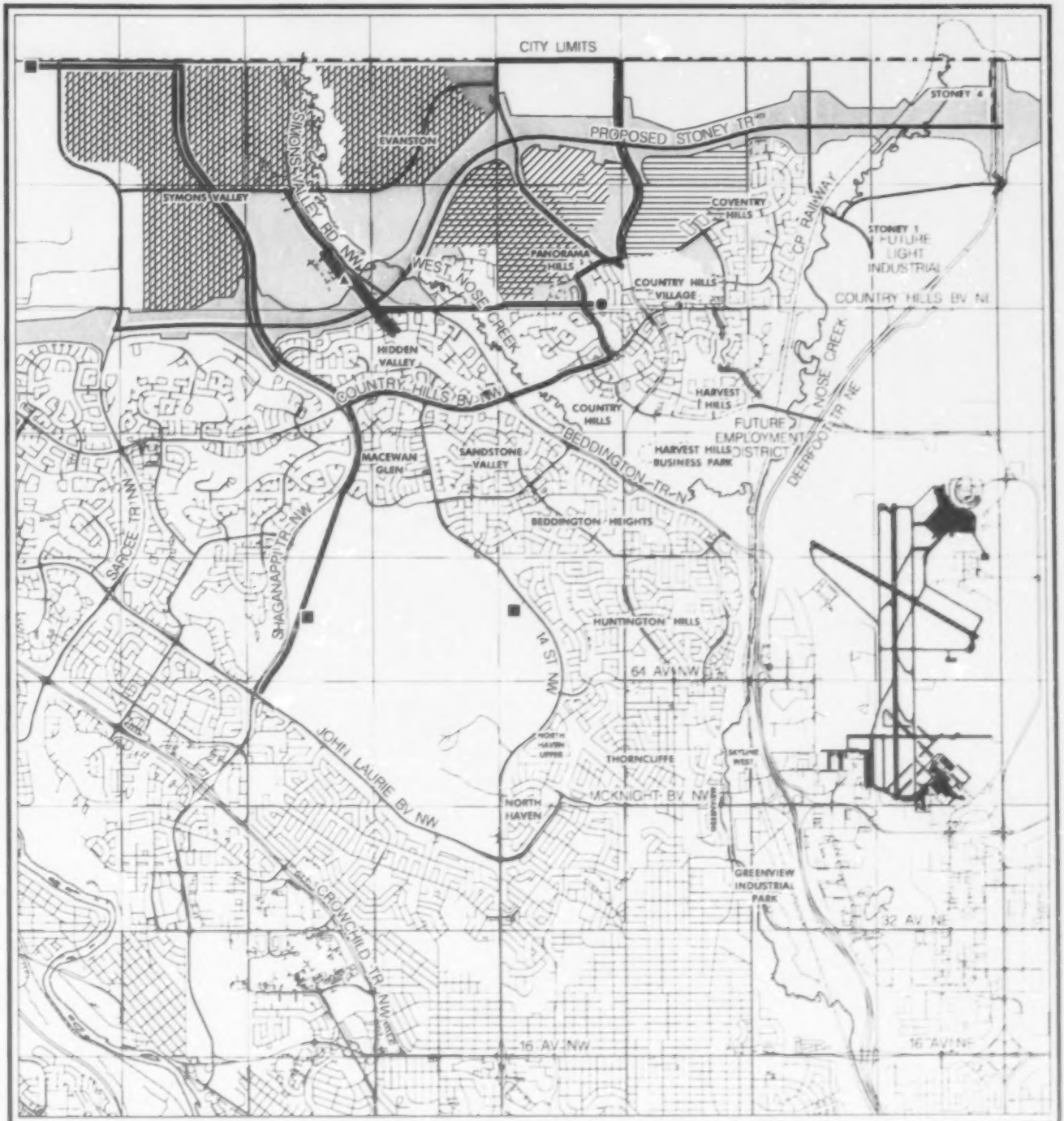
NORTH SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



NORTH SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



Estimated housing and population capacities are based on planning approvals currently in place and / or on development densities generally being achieved in new areas. Estimates do not include recently annexed lands without policy plans in place (refer to Sector Maps for locations).



UNSUBDIVIDED RESIDENTIAL LAND SUPPLY (as of April 2001)

- FULLY SERVICED (BOTH WATER AND SEWER IN PLACE)
- PARTIALLY SERVICED (WATER OR SEWER BUT NOT BOTH)
  - NEEDS WATER
  - NEEDS STORM
  - NEEDS SANITARY
- UNSERVICED (NO WATER OR SEWER IN PLACE)

- FUTURE SANITARY SEWER TRUNK
- FUTURE STORM SEWER TRUNK
- FUTURE WATER FEEDERMAINS
- FUTURE RESERVOIR
- FUTURE PUMP STATION
- FUTURE PRESSURE REDUCTION STATION
- FUTURE SANITARY LIFT STATION

0 1 Mile
0 1.6 Km

- SECTOR BOUNDARY
- FUTURE EXPRESSWAY
- FUTURE MAJOR ROAD
- TRANSPORTATION UTILITY CORRIDOR
- AREA SUBJECT TO REVIEW

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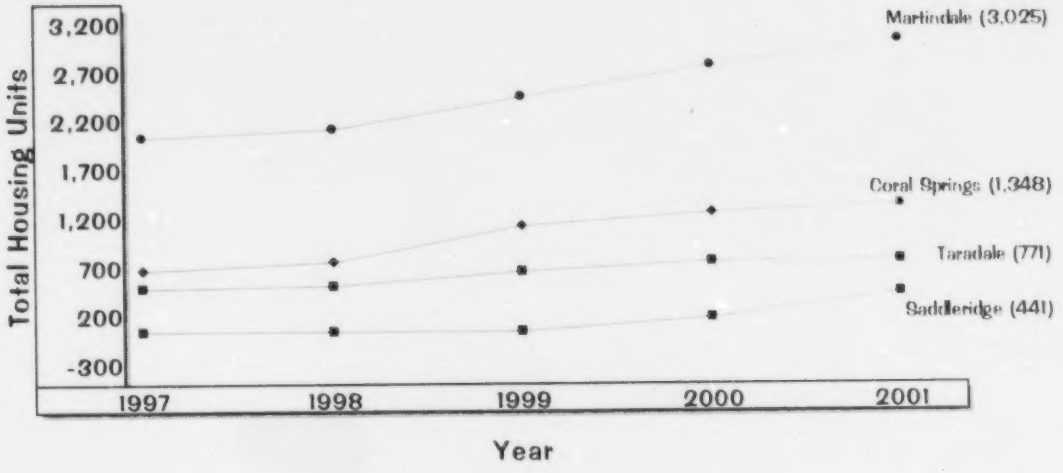
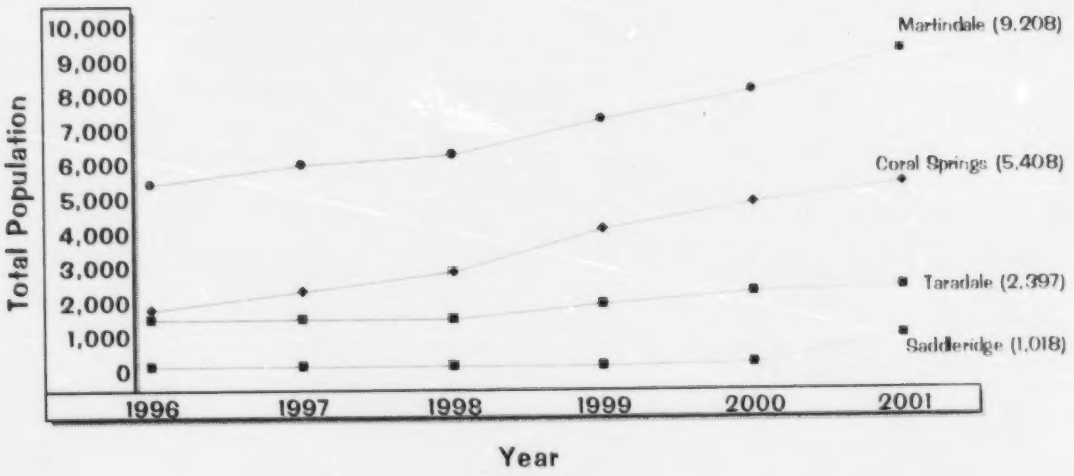
SHORT-TERM GROWTH MANAGEMENT STRATEGY

NORTH SECTOR MAP 1

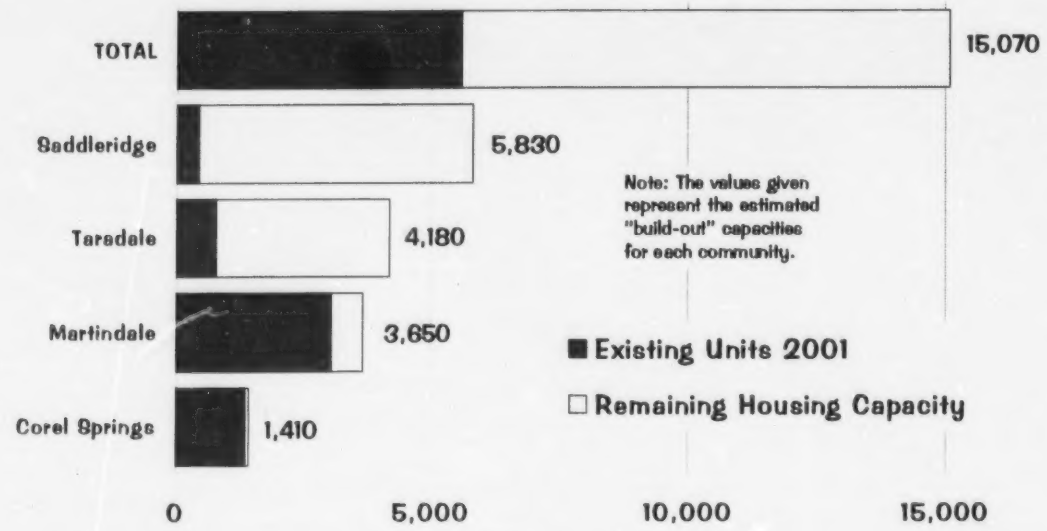
NORTHEAST SECTOR
RECENT GROWTH IN HOUSING



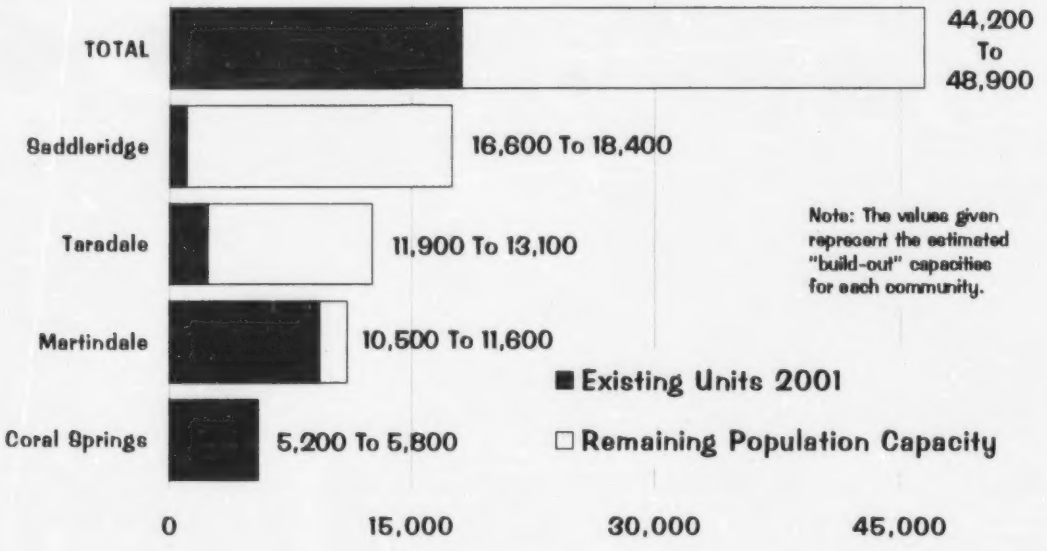
NORTHEAST SECTOR
RECENT GROWTH IN POPULATION



NORTHEAST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



NORTHEAST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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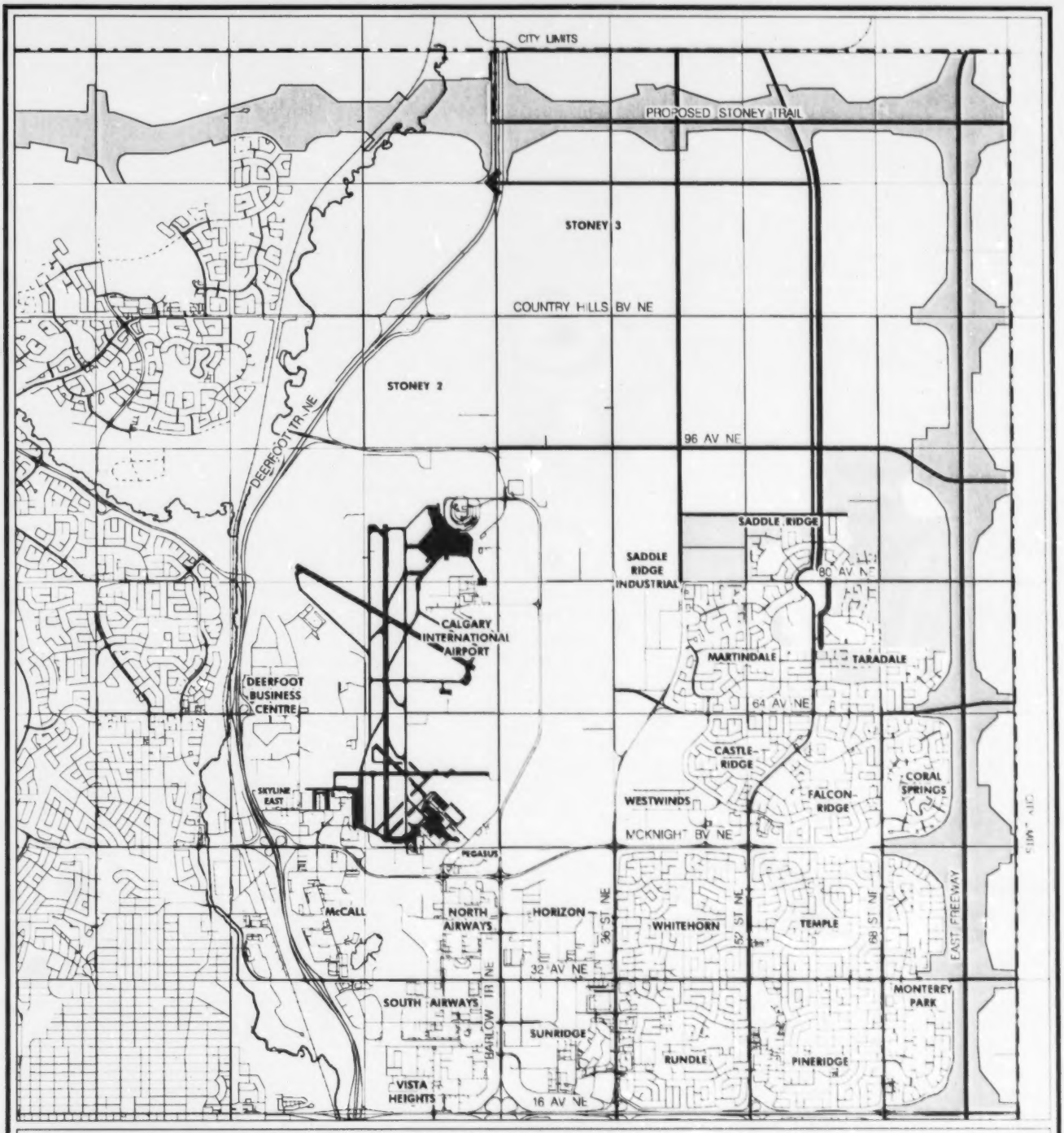

UNSUBDIVIDED RESIDENTIAL LAND SUPPLY (as of April 2001)

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  - NEEDS STORM
  - NEEDS SANITARY
- UNSERVICED (NO WATER OR SEWER IN PLACE)

- FUTURE SANITARY SEWER TRUNK
- FUTURE STORM SEWER TRUNK
- FUTURE WATER FEEDERMAINS
- FUTURE RESERVOIR
- FUTURE PUMP STATION
- FUTURE PRESSURE REDUCTION STATION
- FUTURE SANITARY LIFT STATION

0 1 Mile
0 1.6 Km

- SECTOR BOUNDARY
- FUTURE EXPRESSWAY
- FUTURE MAJOR ROAD
- TRANSPORTATION UTILITY CORRIDOR
- AREA SUBJECT TO REVIEW

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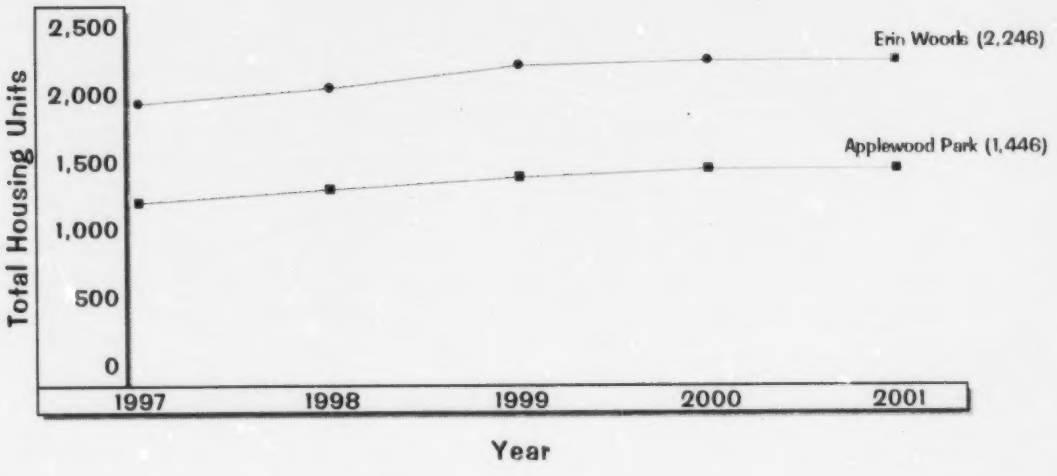
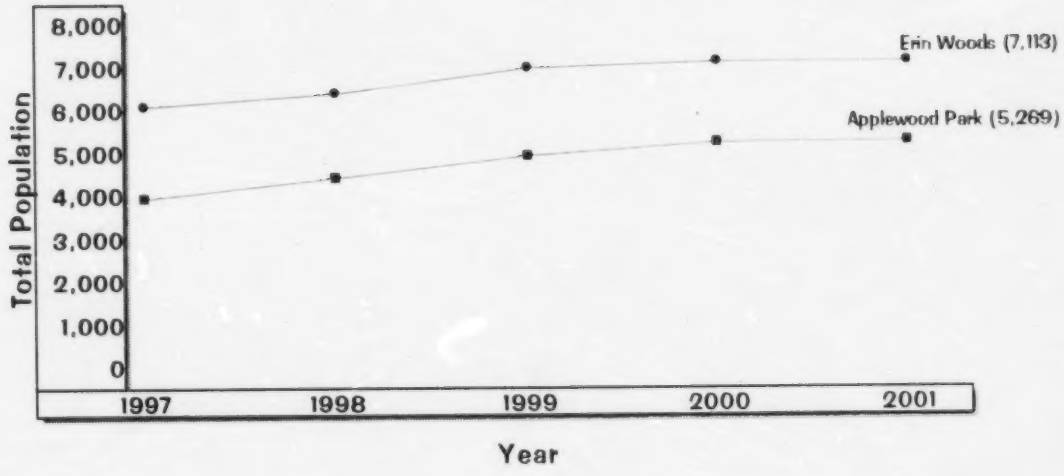
SHORT-TERM GROWTH MANAGEMENT STRATEGY

NORTHEAST SECTOR
MAP 2

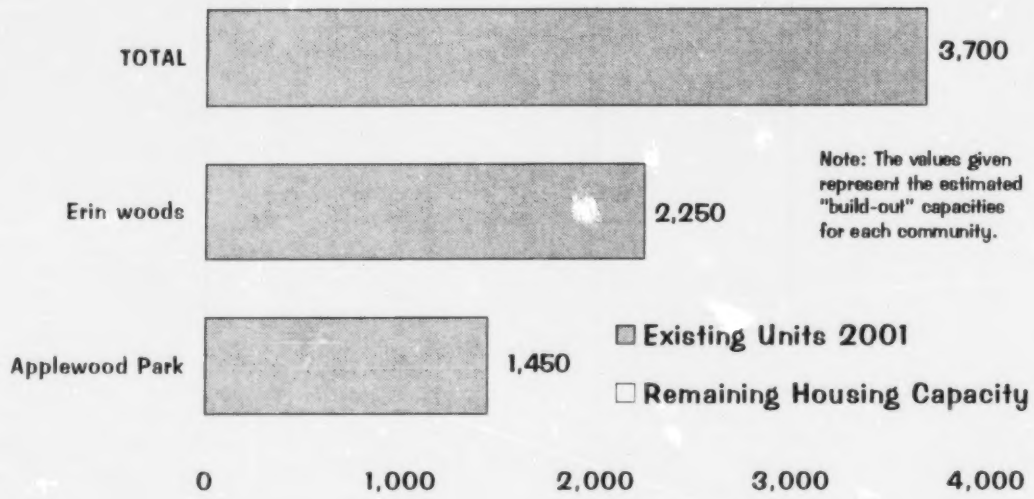
EAST SECTOR
RECENT GROWTH IN HOUSING



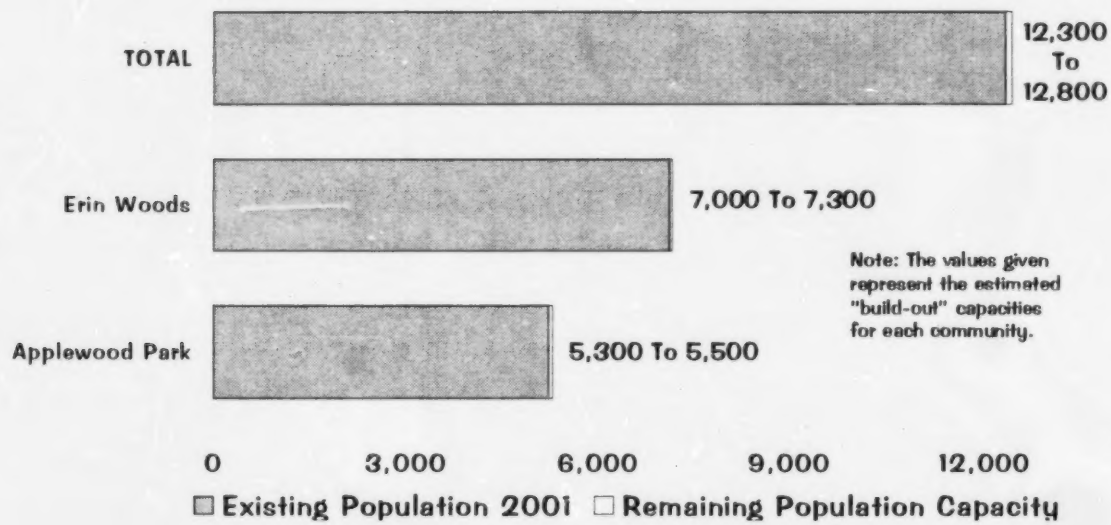
EAST SECTOR
RECENT GROWTH IN POPULATION



EAST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



EAST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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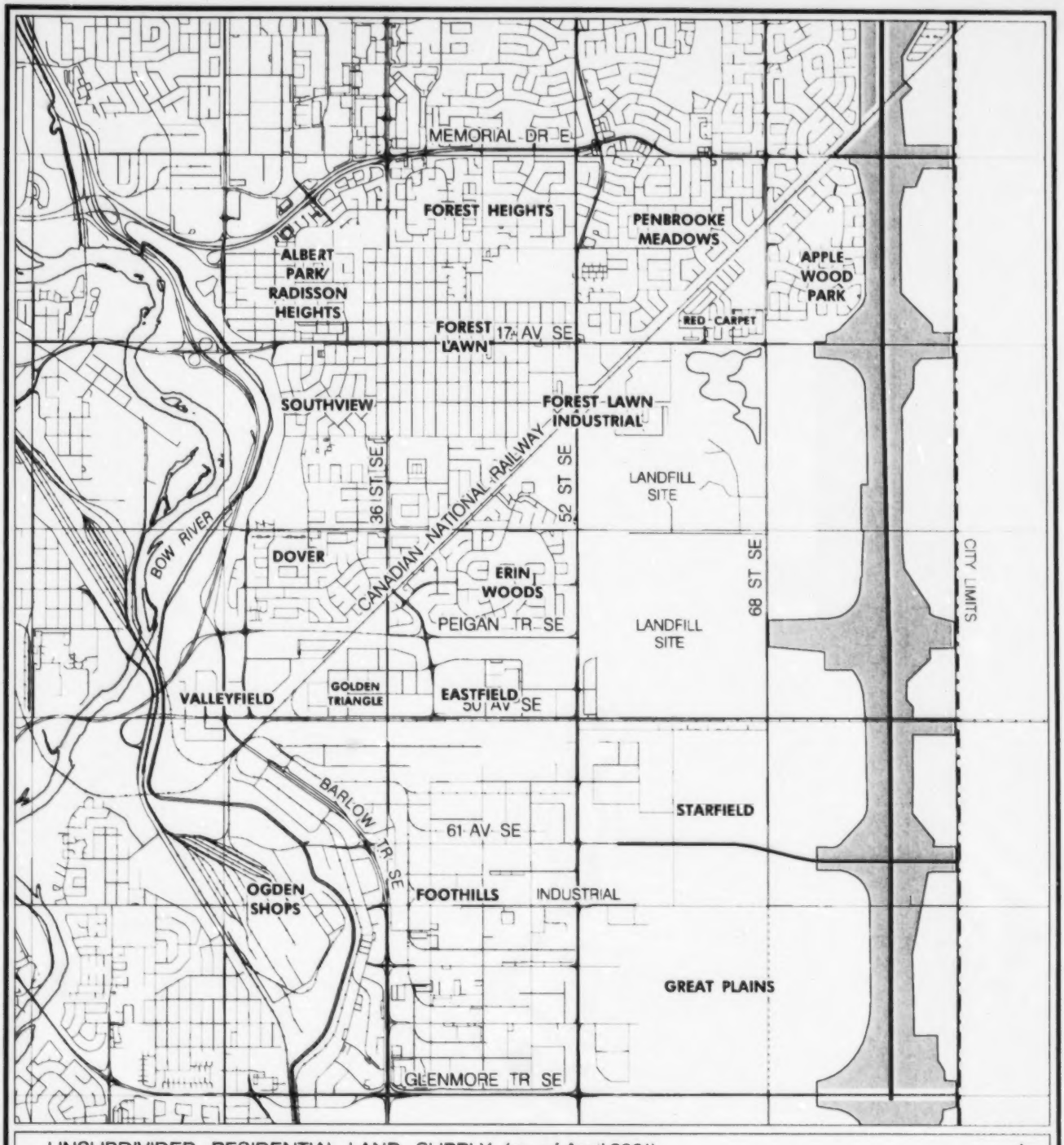

UNSUBDIVIDED RESIDENTIAL LAND SUPPLY (as of April 2001)

- FULLY SERVICED (BOTH WATER AND SEWER IN PLACE)
- PARTIALLY SERVICED (WATER OR SEWER BUT NOT BOTH)
  - NEEDS WATER
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- FUTURE PUMP STATION
- FUTURE PRESSURE REDUCTION STATION
- FUTURE SANITARY LIFT STATION

0 1 Mile
0 1.6 Km

- SECTOR BOUNDARY
- FUTURE EXPRESSWAY
- FUTURE MAJOR ROAD
- TRANSPORTATION UTILITY CORRIDOR
- AREA SUBJECT TO REVIEW

THE CITY OF CALGARY
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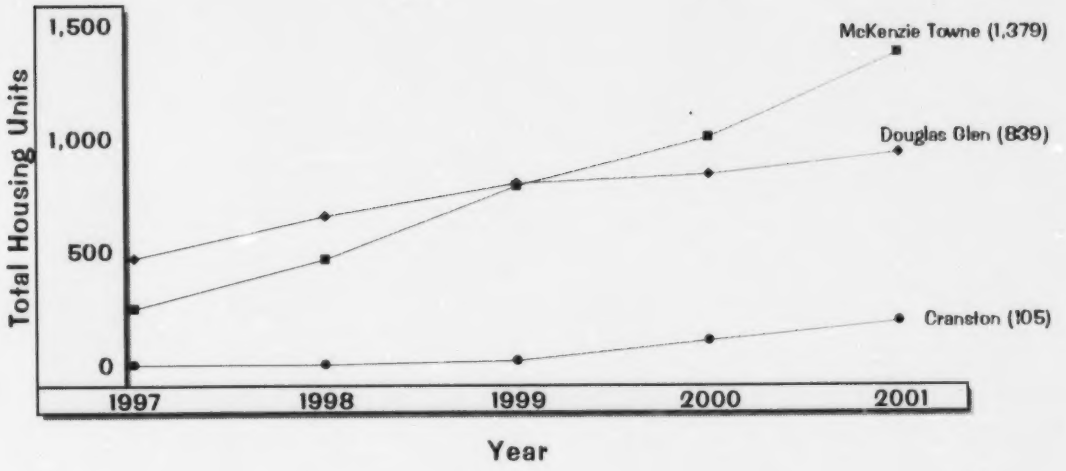
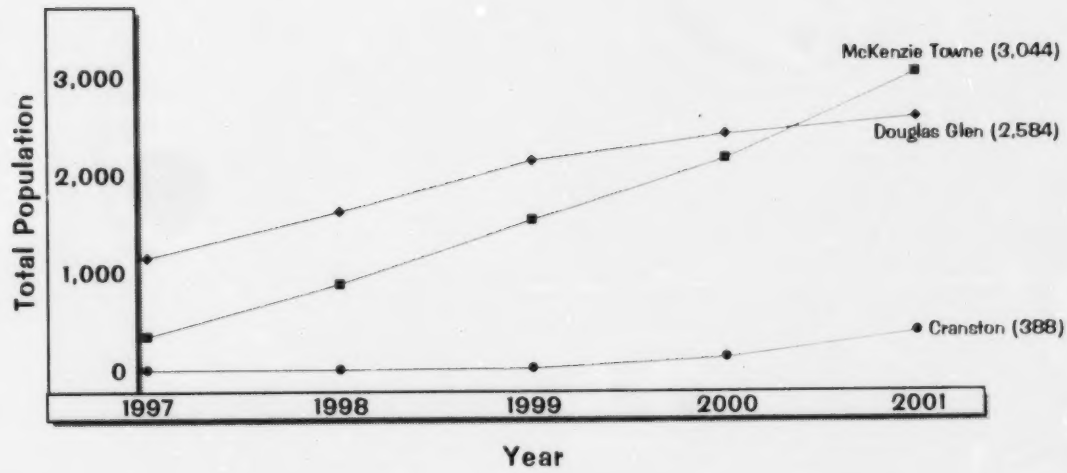
SHORT-TERM GROWTH MANAGEMENT STRATEGY

EAST SECTOR MAP 3

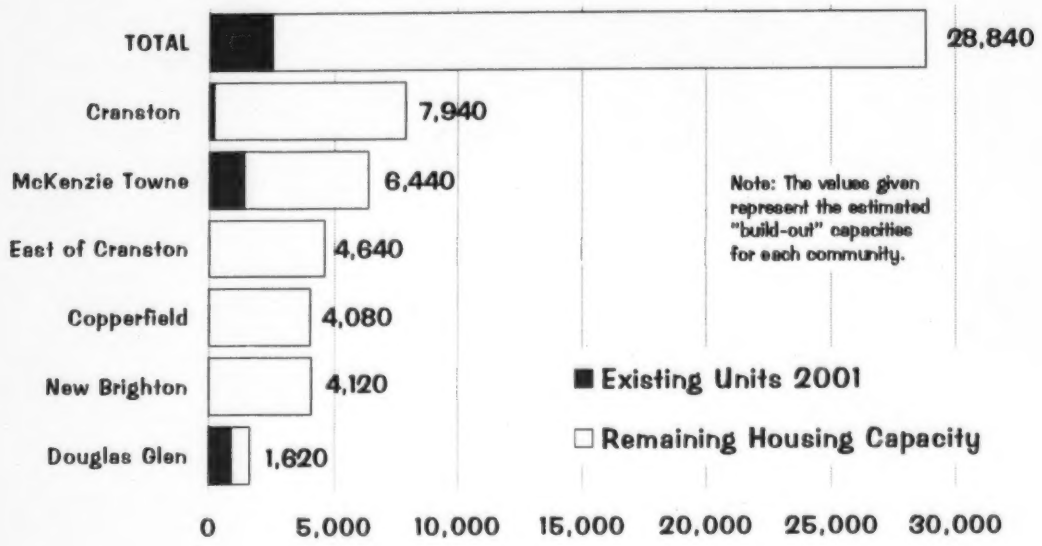
SOUTHEAST SECTOR
RECENT GROWTH IN HOUSING



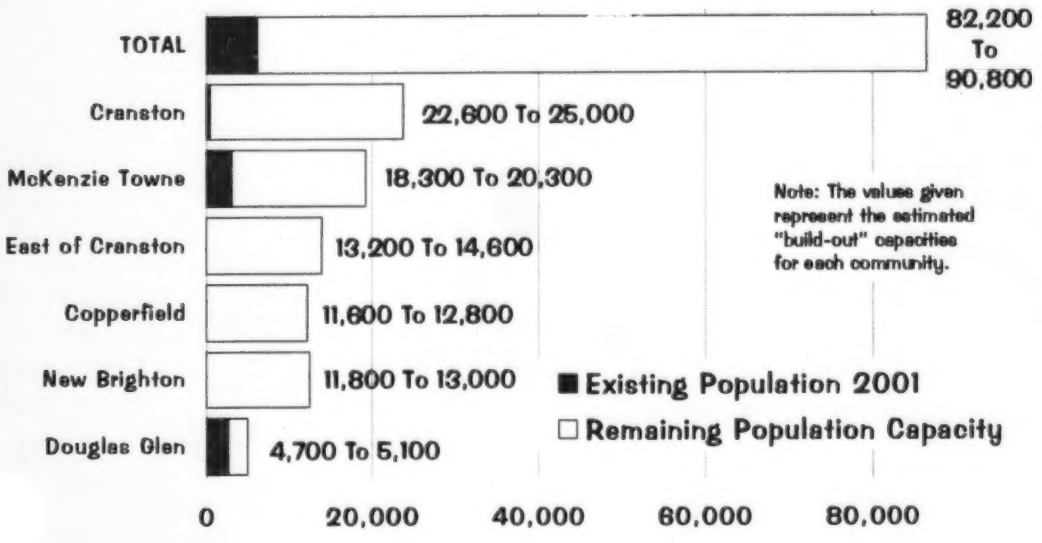
SOUTHEAST SECTOR
RECENT GROWTH IN POPULATION



SOUTHEAST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



SOUTHEAST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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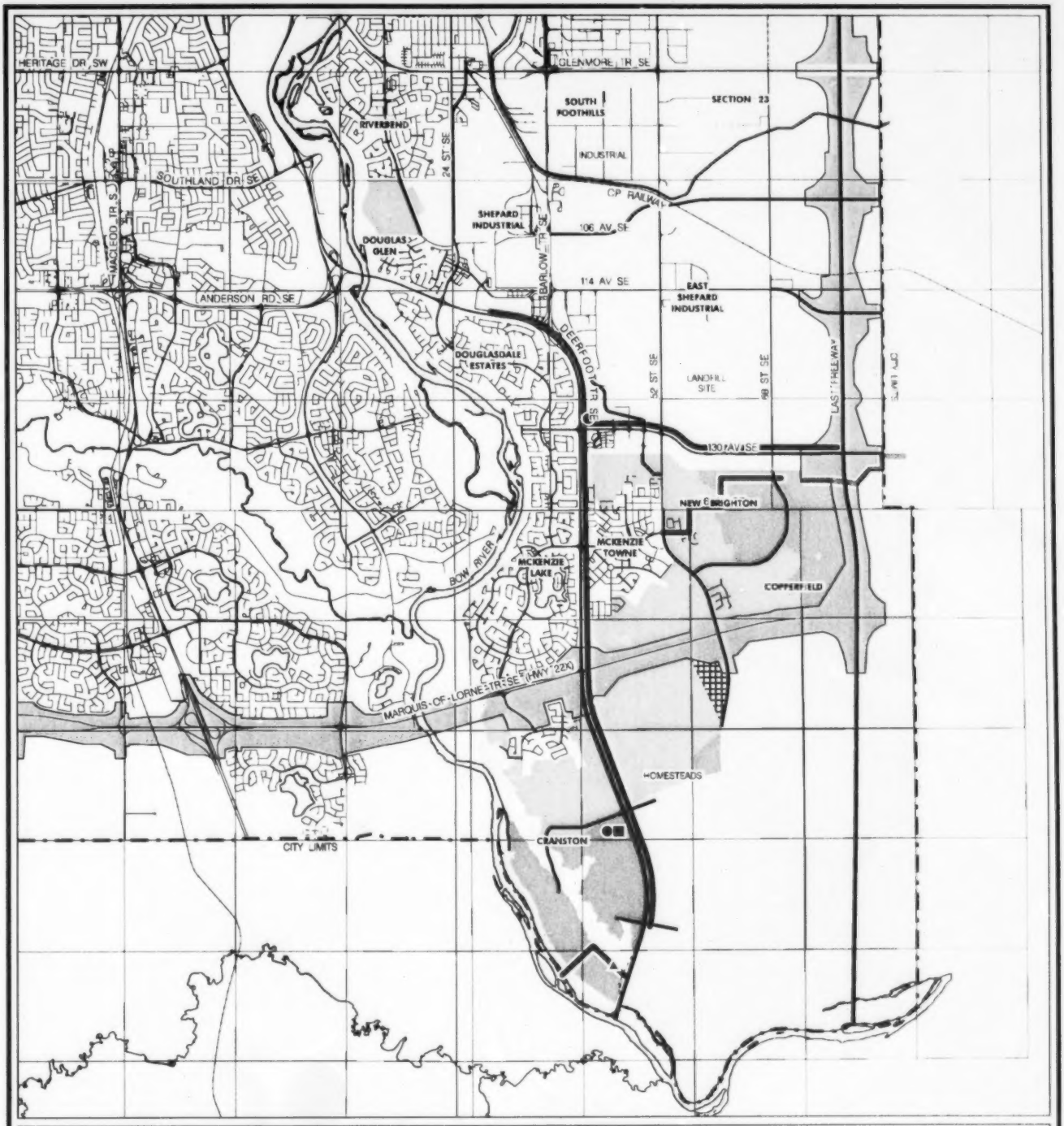

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SHORT-TERM GROWTH MANAGEMENT STRATEGY

SOUTHEAST SECTOR
MAP 4

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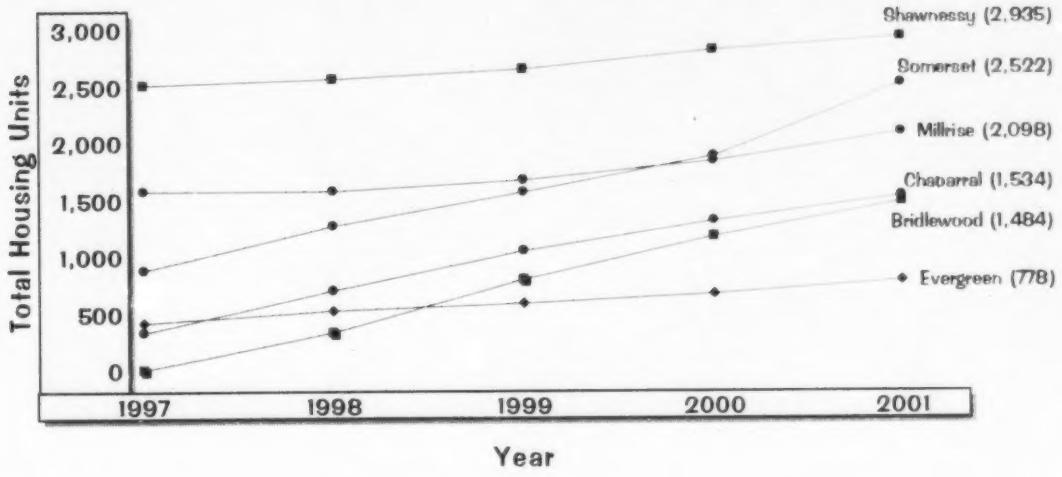
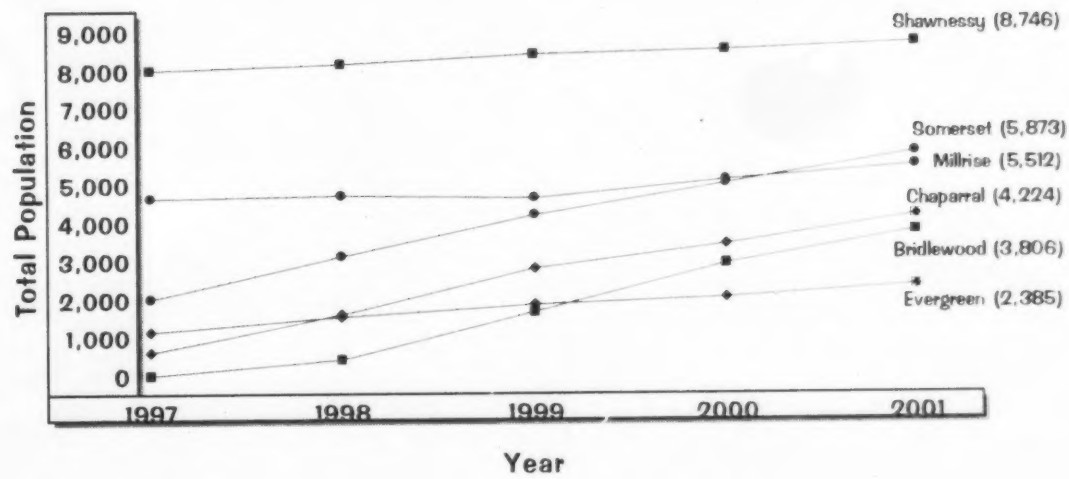
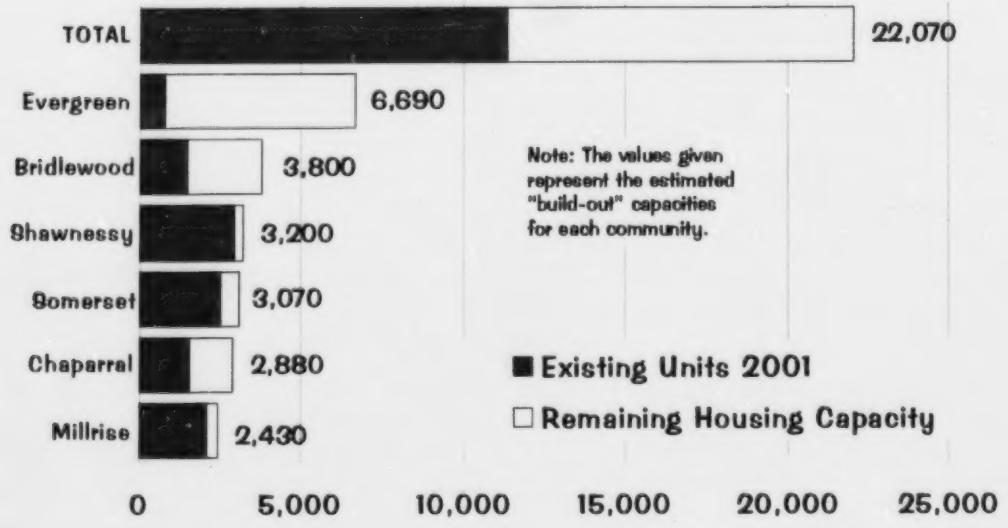
SOUTH SECTOR
RECENT GROWTH IN HOUSING



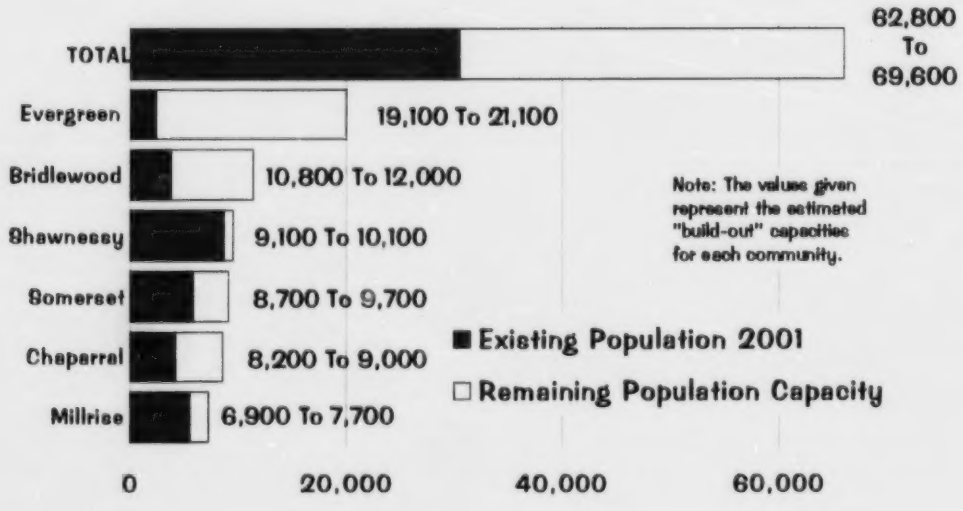
SOUTH SECTOR
RECENT GROWTH IN POPULATION



SOUTH SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



SOUTH SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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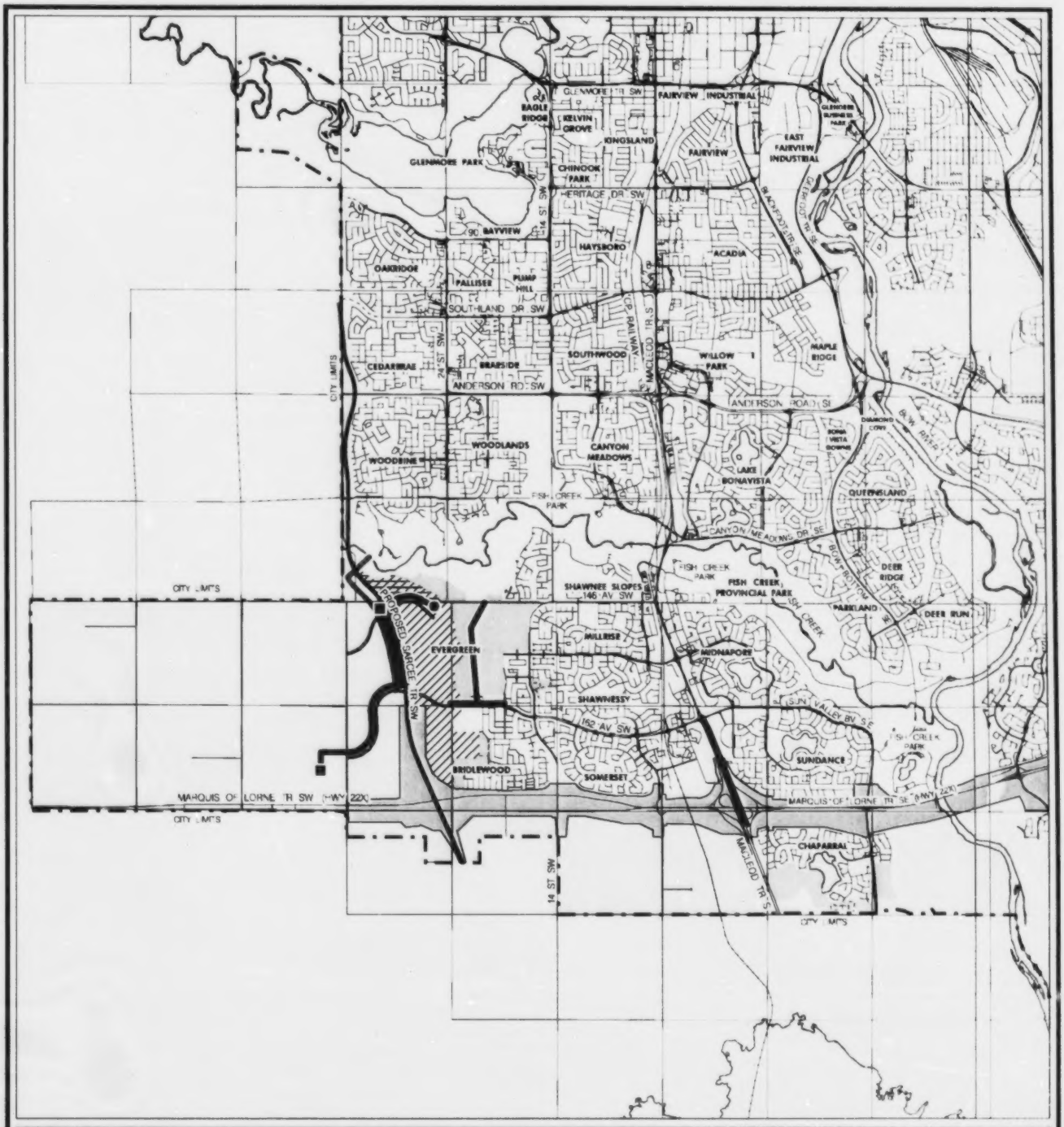

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SHORT-TERM GROWTH MANAGEMENT STRATEGY

SOUTH SECTOR
MAP 5

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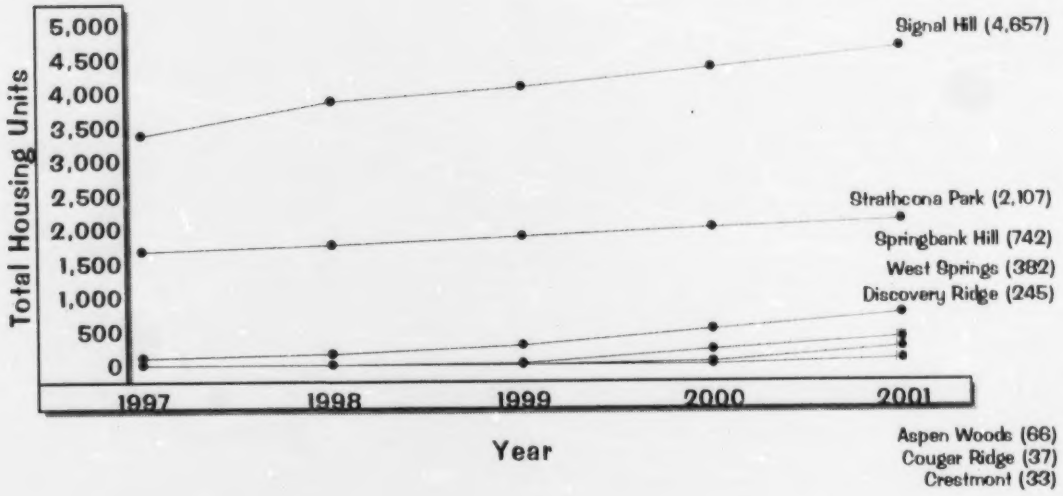
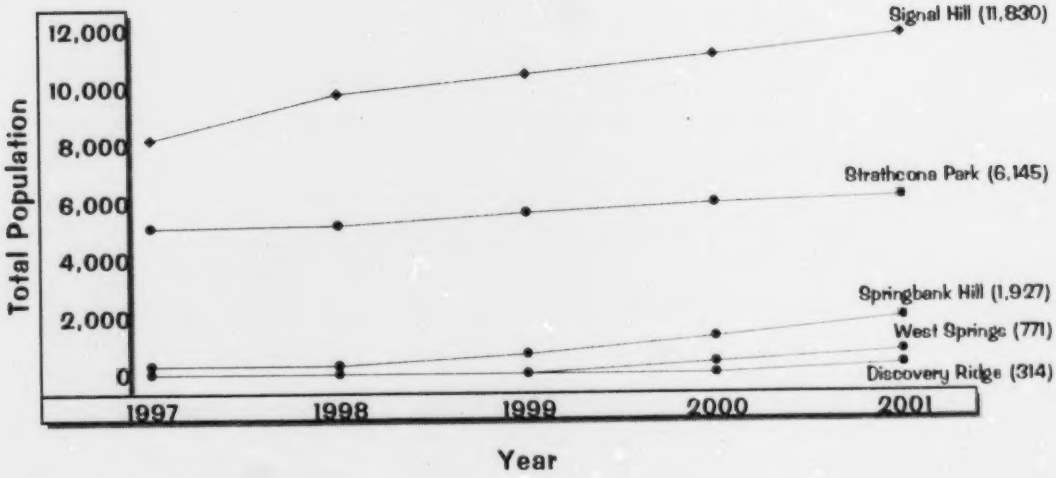
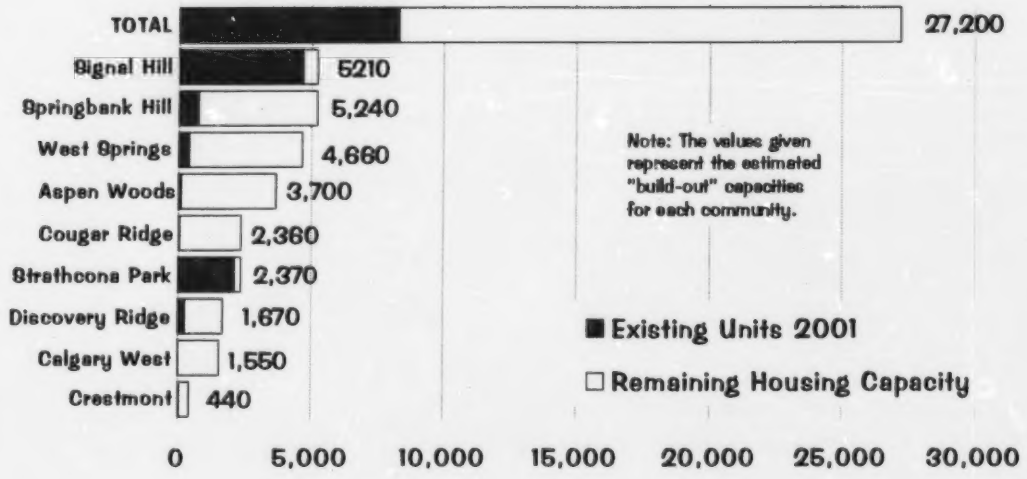
WEST SECTOR
RECENT GROWTH IN HOUSING



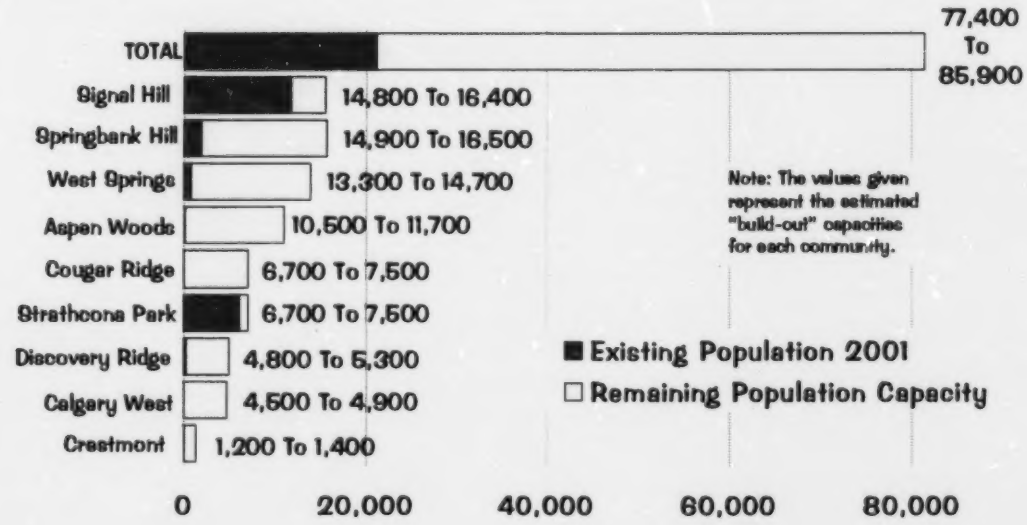
WEST SECTOR
RECENT GROWTH IN POPULATION



WEST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



WEST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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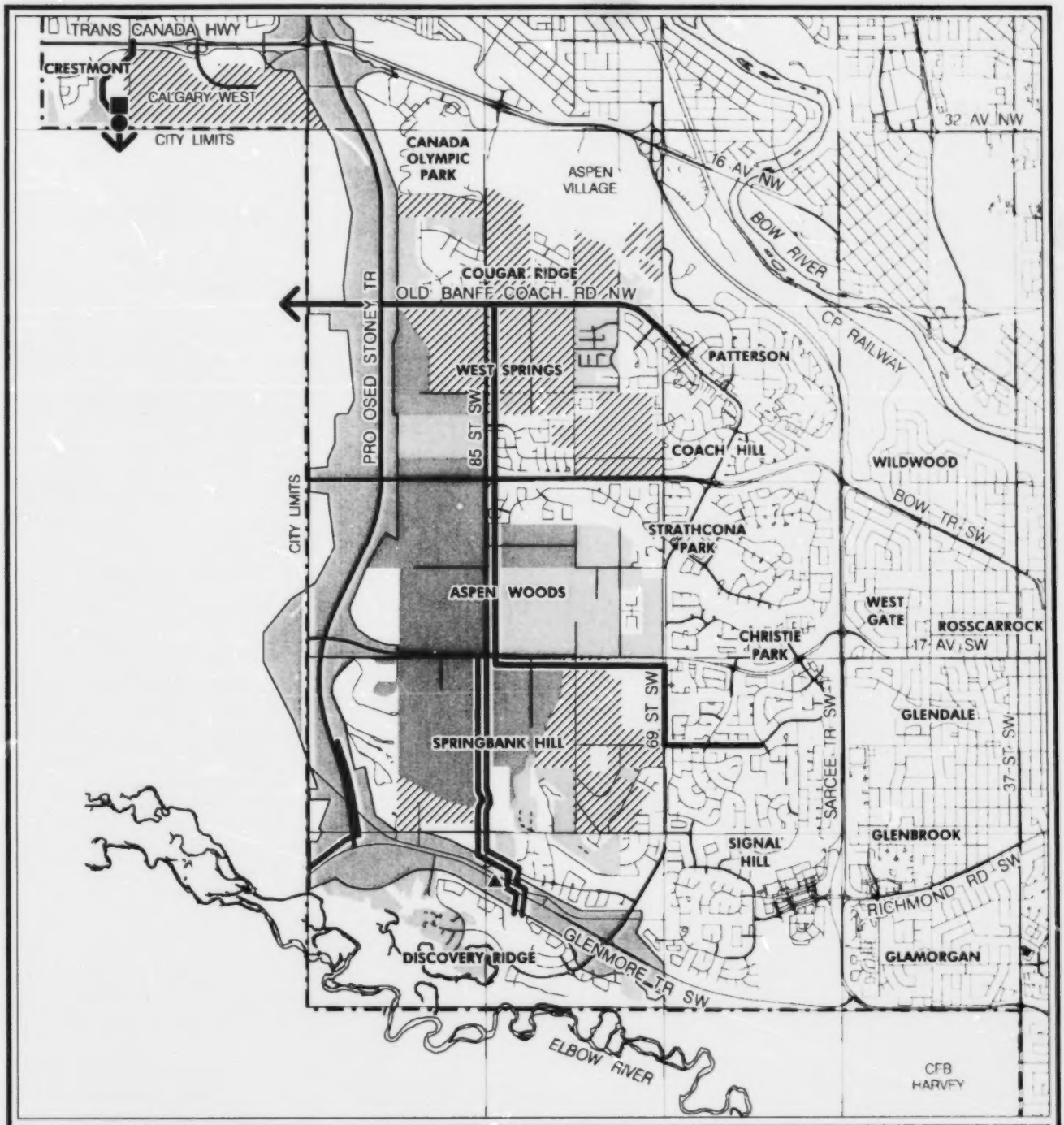

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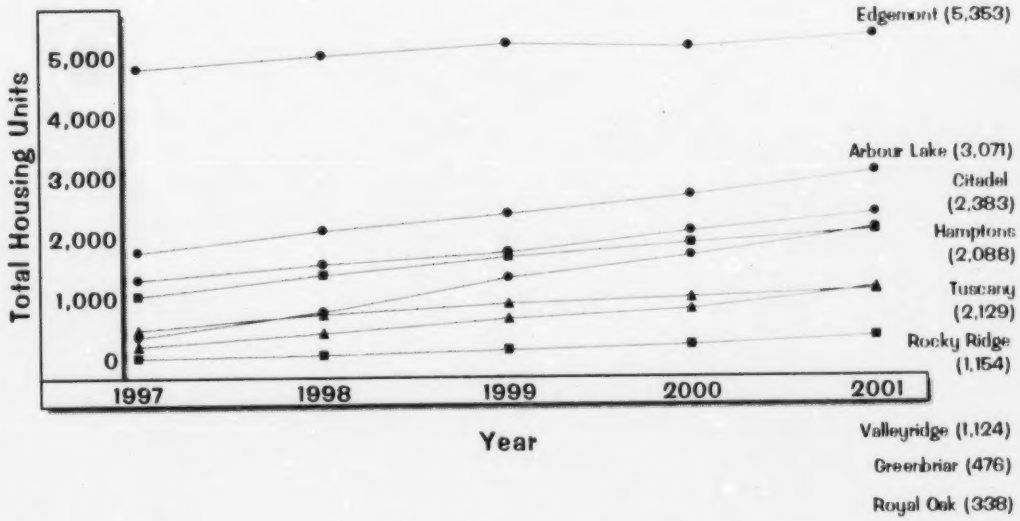
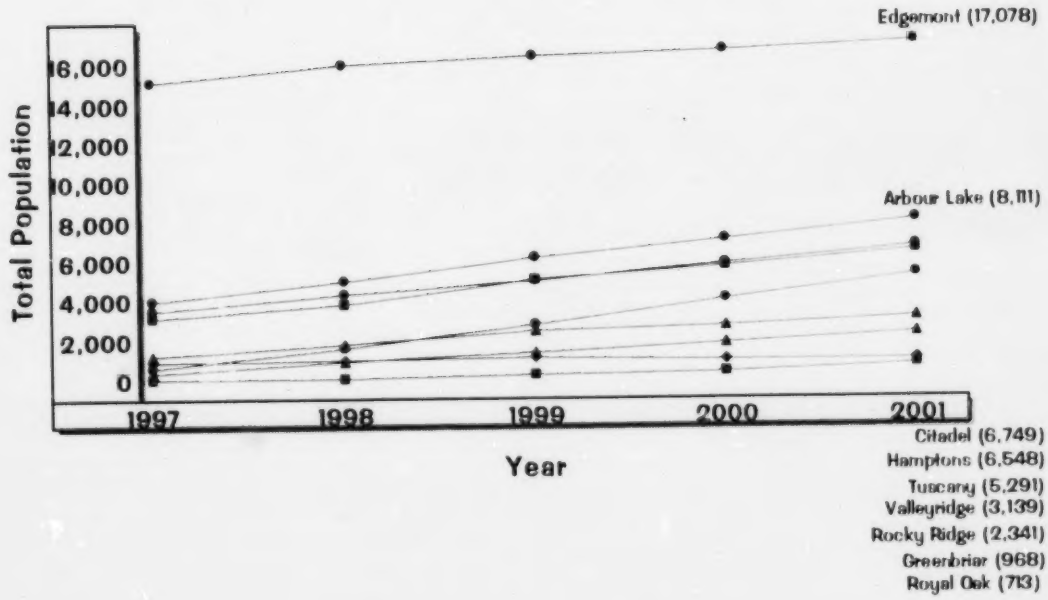
SHORT-TERM GROWTH MANAGEMENT STRATEGY

WEST SECTOR
MAP 6

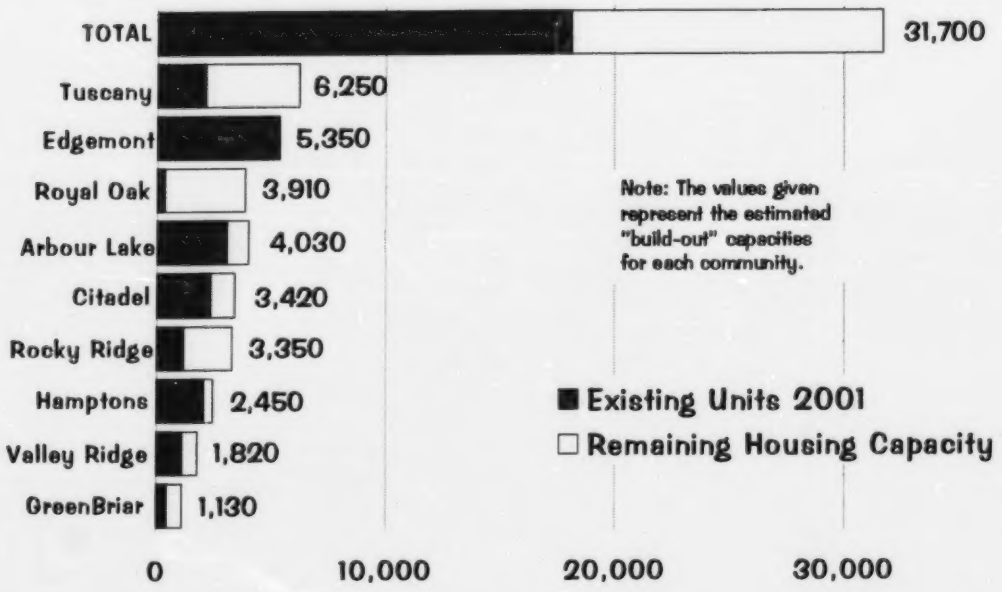
NORTHWEST SECTOR
RECENT GROWTH IN HOUSING



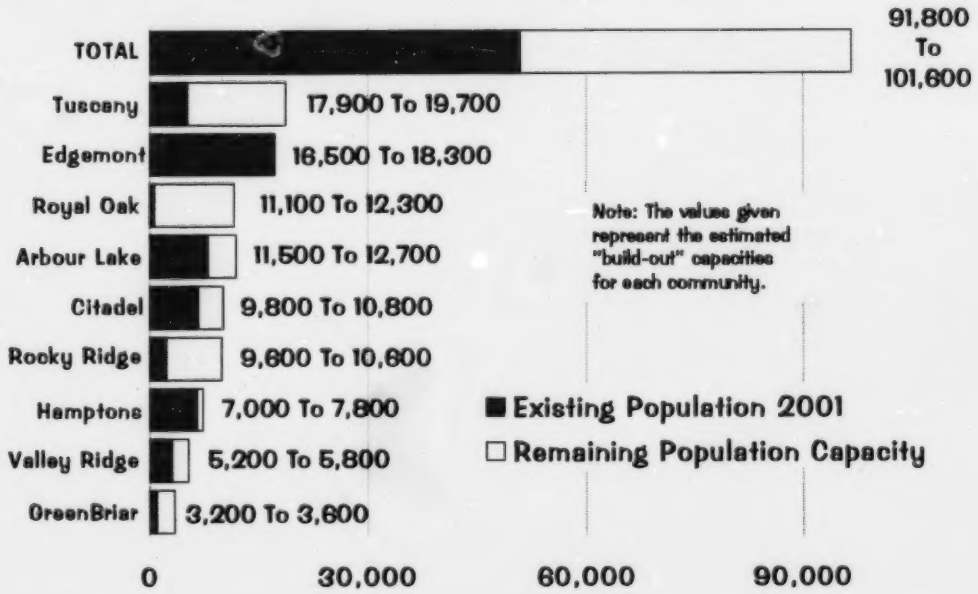
NORTHWEST SECTOR
RECENT GROWTH IN POPULATION



NORTHWEST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



NORTHWEST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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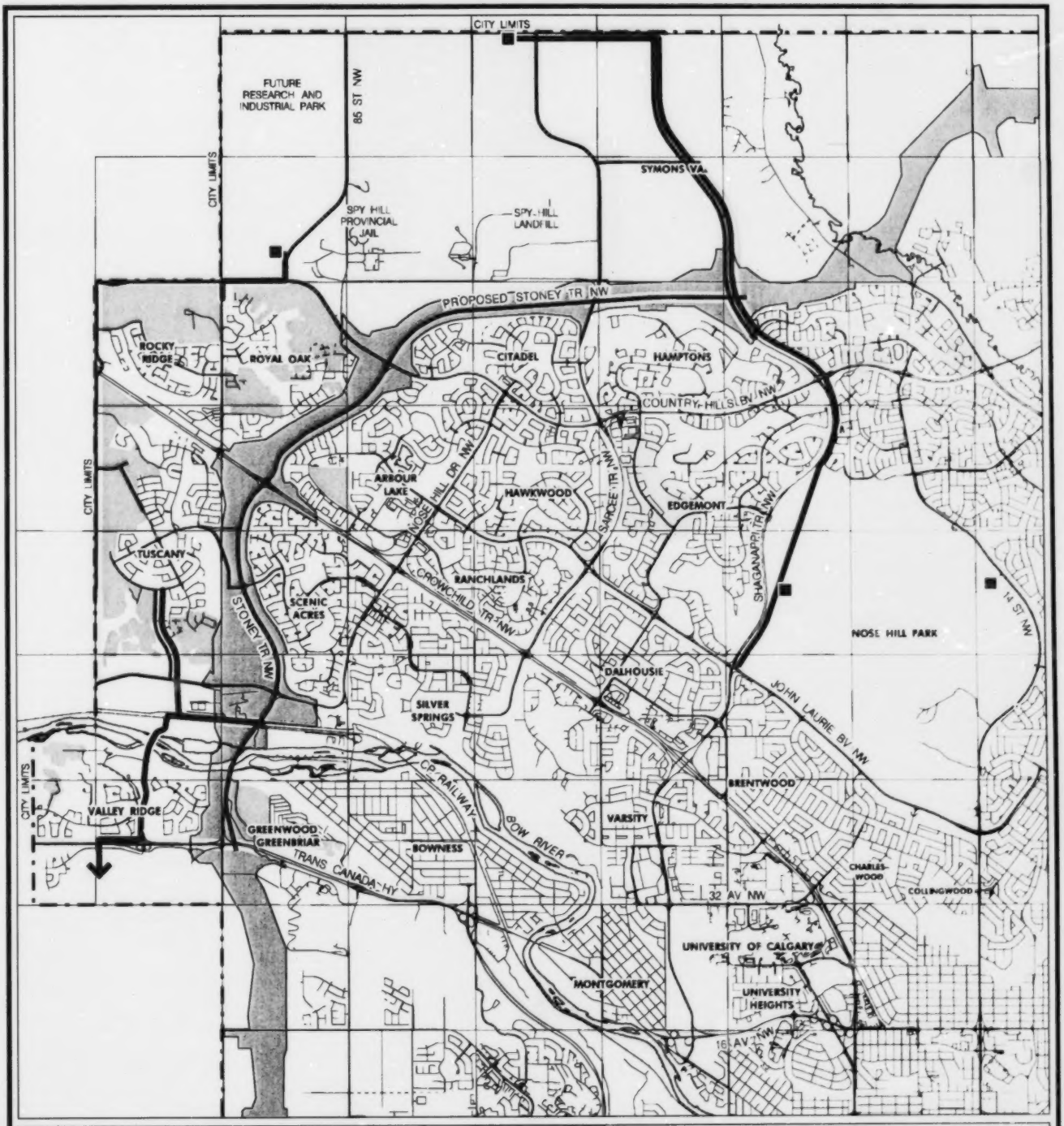

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SHORT-TERM GROWTH MANAGEMENT STRATEGY

NORTHWEST SECTOR
MAP 7

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Appendix III

Development Industry Comments

URBAN DEVELOPMENT INSTITUTE CALGARY CHAPTER

SUITE 770, 999 - 8th STREET S.W., CALGARY, ALBERTA T2R 1J5
PHONE: (403) 531-6250 FAX: (403) 531-6252 E-MAIL: info@udicalgary.com WEBSITE: www.udicalgary.com

April 29, 2002

Mr. Decker Shields, Planning Analyst
Planning and Transportation Policy
Land Use and Mobility, Location #8108
City of Calgary
P.O. Box 2100, Stn. M.
Calgary AB T2P 2M5

Dear Decker:

RE: 2002 to 2006 Residential Short Term Management Strategy

Thank you for the opportunity to review and provide input into the 2002 to 2006 Residential Short Term Management Strategy.

We are pleased that you have revised the base model projections relating to housing starts over the next five years; although the number is still below the actual number of starts for last year and the pace set by the first quarter of 2002. The housing start projections are a key component of the STGMS as they identify the demands for land and infrastructure required in support of growth in the Calgary economy. The Urban Development Institute Calgary Chapter would be pleased to begin working with you earlier on the information included in this document to ensure that the theoretical projections more closely match what our industry is seeing.

In addition, we would like to suggest that you consider tracking of "tentative plan" lots/acre in conjunction to tracking the approved outline plan lot counts. This would be beneficial in monitoring overall density trends as well as utilization trends (lower net developable acres due to site constraints of a given sector). Both of these items have a strong influence on the projection of the amount of land needed to support forecasted housing starts.

Once again thank you for the opportunity to review the STGMS; we are pleased to offer our support for the document.

Yours truly,

Judy Ferguson

Judy A. Ferguson
Executive Director

Cc: Roberto Binda, Chair UDI Planning Committee
Paul Taylor, Chair, UDI Calgary Chapter

CALGARY REGION HOME BUILDERS ASSOCIATION

April 16, 2002

Mr. Decker Shields
Land Use & Mobility
Planning & Transportation Policy (#8117)
The City of Calgary
P.O. Box 2100
Postal Station M
Calgary, Alberta T2P 2M5

Subject: 2002-2006 Short Term Growth Management Strategy

Dear Mr. Shields:

Thank you for the opportunity to review the 2002-2006 Short Term Growth Management Strategy.

The CRHBA is pleased to offer its support of this document with the revised changes and appreciate the opportunity to provide input and comments.

Sincerely

Donna K. Moore
Executive Officer

DKM/tm

#100 3016 5th Avenue N.E., Calgary, Alberta T2A 6K4 Telephone (403) 235-1911 Fax (403) 248 1272
Email: info@crhba.com www.crhba.com